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THE BATTLE OF THE CORAL SEA, MAY 1 TO
MAY 11 INCLUSIVE, 1942. STRATEGICAL
AND TACTICAL ANALYSIS

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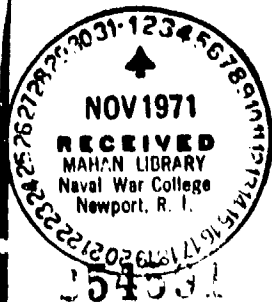


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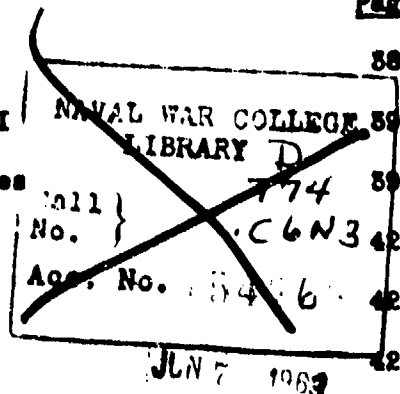


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FOREWORD

1. This analysis of the Battle of the Coral Sea was prepared by the Naval War College. It is based on information, from both Allied and Japanese sources, which is wider, more complete and more up to date than that available to writers of similar material published during the war.
2. All information from all sources was not available to the Naval War College. For that reason, new facts and circumstances may come to light, from time to time which may change some of the analyses produced herein.
3. The Battle of the Coral Sea was the first real war test of the tactical formations of the Fleet as well as the tactical ability of the principal Commanders. The pages of history have invariably revealed defects and it would have been nothing short of miraculous had such defects not been present in this action.
4. As a result of battle lessons learned, and as quickly applied, the ability of the Navy to conduct warfare steadily improved. As time went on, the lesson so often forgotten, that the test of battle is the only test which proves the combat ability of Commanders was relearned. The ability or the lack of ability of the various Commanders, in the art of war became apparent. Valor alone was shown to be insufficient, for valor is not an attribute of only one race but is an attribute and a heritage of many races. The indispensable qualification for command was shown to be the ability in combat to apply the science of war to active military situations.
5. The present senior officers of the Navy are well aware of the reasons for changes in established doctrines and in the development of new ones. But this cannot necessarily be said of the Commanders of the future, who very probably will be inexperienced in command in war.
6. Finally, all comments and criticisms are designed to be constructive. By indicating what appear to be sound and unsound decisions, and the apparent reasons for arriving at them, it is hoped to provoke earnest thought among prospective commanders and thus to improve professional judgment in command.

COMMANDERS

Allied

Commander Task Force 17 (CTF 17) Rear Admiral Frank J. Fletcher, U.S.N.

Commander Task Force 11 (CTF 11) Rear Admiral Aubrey W. Fitch, U.S.N.

Commander Task Force 44 (CTF 44) Rear Admiral J. G. Grace, R.N.

Commander Southwest Pacific Area
(COMSOWESPAC) General Douglas MacArthur, U.S.A.

Commander in Chief, Pacific
Fleet (CINCPAC) Admiral Chester W. Nimitz, U.S.N.

Commander Allied Naval Forces
SOWESPAC Vice Admiral H. Fairfax Leary, U.S.N.

Commander Allied Air Forces
SOWESPAC Lt. General George H. Brett, U.S.A.

Japanese

Commander 4th Fleet Vice Admiral Narimi Inoue, I.J.N.

Commander Striking Force Rear Admiral T. Hara, I.J.N.

Commander 11th Air Fleet Vice Admiral T. Sukahara, I.J.N.

All times in this Analysis
are Time Zone (-11).

INTRODUCTION

The Battle of the CORAL SEA was the first major engagement in naval history in which the issue was decided entirely by air operations. No gun actions between surface ships occurred. The final battle was unusual in that both Allied and Japanese forces sought to destroy each other by air operations at the same time. The resultant overlapping found the American carrier air groups attacking the enemy carriers and supporting ships at virtually the same instant that the Japanese carrier air groups were attacking the American carriers and supporting ships. Throughout this action, weather played an important role and seriously affected its outcome.

The battle consisted of three phases. The first phase, from May 1 to 1632 May 4, embraced the operations of the Japanese in capturing TULAGI, and of the Allies in endeavoring to disrupt that operation through air attack, wherein the Japanese lost the destroyer KIKUZUKI, as well as some smaller craft. The second phase, from 1632 May 4th to 2200 May 7th, embraced the operations between the above Allied air attack on TULAGI and the recovery of the Japanese flyers from the dusk air attack on the Allied carrier force southeast of MISIMA. Among these operations were the Allied carrier based air attack on the SHOHO wherein the SHOHO was sunk; the Japanese carrier based air attack on the NEOSHO and SIMS wherein the SIMS was sunk and the NEOSHO damaged; the abortive Japanese land based air attack on the Support Group, and the abortive Japanese carrier based air attack on the Allied carrier task group. The third phase, from 2200 May 7th to 0600 May 11th, embraced the final action referred to in the preceding paragraph between the Japanese carrier task force on the one hand, and the Allied carrier task force on the other, as well as the Japanese search for additional Allied forces after the battle. In this phase the LEXINGTON was sunk; the SHOKAKU and YORKTOWN lightly damaged, all by air attack.

This battle was the inevitable result of the desire on the part of Japan to extend her frontiers ever more to the south in order to ensure the safety of RABOUL* and to cut the lines of communication between the United States and Australia,** and, on the other hand, to the desire on the part of the United States to deny this further expansion in order to obtain time for building up her strength in Australia, and in the islands lying between Pearl Harbor and Australia, and to obtain time for the completion of her training and production programs.***

Japan was influenced greatly in her decisions by the ease with which her Army and Navy had completed their initial operations. In four months

*Interrogation of Vice Admiral Fukudome, I.J.N.9-12 December 1945 USSBS Volume II, p.524.

**Summary Report (Pacific War) USSBS July 1946, p.5

***Summary Report (Pacific War) JSSBS July 1946, p.4

she had conquered vast areas including WAKE, GUAM, RABAU, and had driven Allied forces out of BURMA. She was also strongly influenced by the Doolittle raid of 18 April 1942 on TOKYO, which attack took place during the very time that her planners were discussing new operations for their successful forces. The effect on these planners, of this sporadic attack, was profound. As a result of these discussions in TOKYO, Japan initiated a new plan, of which many of the objectives had been planned previously, which provided, as the initial move, an advance into the SOLOMONS and PORT MORESBY, NEW GUINEA, to be followed, if successful, by a further advance into NEW CALEDONIA, SAMOA and the FIJI Islands and of later moves to capture MIDWAY and to temporarily occupy the ALEUTIANS.* It should be quite evident that should these moves be successfully accomplished, the line of communication between the United States and Australia would be definitely cut and all advanced staging areas west of Pearl Harbor would be effectively denied. This the United States could not permit and, therefore, it became necessary for her to endeavor to turn back any movement into the SOLOMONS and PORT MORESBY long before her training and production programs were adequate to support such an operation.

Japanese information received, since the surrender of Japan indicates that it is quite possible that the strongest pressure for the movements above referred to came from the Doolittle raid. Combat Narrative "The Battle of the Coral Sea"*** states--quote: "Air bombing of TOKYO and the other Japanese centers of war industry on April 18th while cheering was only a nuisance raid." Fleet Admiral King stated, "Whatever the damage inflicted by these bombers, the attack was stimulating to morale, which at that time, considering the surrender of BATAAN and the situation in general in the Far East, was a low ebb."**** There seems to have been no serious strategical reason for this raid, other than that it was a "nuisance" raid and that the public morale needed stimulating.

In addition, the decision to make the Tokyo raid had the effect of reducing the American means available for service in the Coral Sea Area. As will be shown later, Japan had three carriers in that area at the time of the Battle; the United States was only able to concentrate two. Had the Tokyo raid not occurred, four carriers would probably have been available to the United States, to combat Japan in the Coral Sea. These carriers were the LEXINGTON, YORKTOWN, HORNET and ENTERPRISE. The LEXINGTON and YORKTOWN were in the area; the HORNET and ENTERPRISE which conducted the Tokyo raid, were en route from Pearl Harbor, having departed for the Coral Sea Area on 30 April.**** Students of warfare will probably wonder what might have occurred to the Japanese forces had all of these carriers been in this action.

*Summary Report (Pacific War) USSBS July 1946, p.5

**Office of Naval Intelligence Publication 1943, "The Battle of the Coral Sea", p.1

***U.S. Navy at War 1941-1945, Official Reports by Fleet Admiral Ernest J. King, U.S.N., p.45

****CINCPAC Operation Order 25-42, Para.5(a), p.5

The Strategic Area - CORAL SEA

The CORAL SEA is an extensive body of water bounded on the west by Northeast AUSTRALIA and its great barrier reef, on the north by Southeast NEW GUINEA, the LOUISIAD ARCHIPELAGO, the SOLOMON ISLANDS and the SANTA CRUZ ISLANDS, on the east by the NEW HEBRIDES and LOYALTY ISLAND groups and NEW CALEDONIA, and on the south by the latitude 25° South. It is an anvil shaped area extending about 1360 miles from TORRES STRAIT to ESPIRITU SANTO ISLAND and 960 miles from GUADALCANAL to 25° South.* Thus there is ample room for fast-carrier task force operations but, in certain areas, caution must be exercised because of navigational hazards incident to scattered reefs and small islands.

The South Equatorial Current entering this sea in the area north of ESPIRITU SANTO ISLAND divides into two branches; one, the ROSSEL CURRENT, passes northwestward along the northern boundary of the CORAL SEA and into TORRES STRAIT; the other, the AUSTRALIA CURRENT, flows southwestward through the central portion of the CORAL SEA and then southward along the coast of AUSTRALIA.

When the Battle of the CORAL SEA occurred there were no Allied harbors in the immediate area suitably equipped to effect major repairs to a damaged ship. The nearest port in Allied hands capable of docking a carrier was at PEARL HARBOR. At SYDNEY there were repair facilities for cruisers and smaller craft. There were, however, smaller harbors in the area which, while equipped with little or no support activities, might be used in an emergency. These were PORT MORESBY, NEW GUINEA; ST. JAMES BAY, ESPIRITU SANTO ISLAND, NEW HEBRIDES; and NOUMEA, NEW CALEDONIA. It was also possible to beach a ship in a number of areas under weak Allied control. However, because of the fact that the CORAL SEA was an area not under command of the American forces nor of the Japanese forces, but was, instead, an area under serious dispute, the availability of any of the harbors mentioned other than NOUMEA and SYDNEY was very problematical.

Weather in the CORAL SEA

The weather in the CORAL SEA area is dominated by the semi-permanent high pressure area of the Southern Hemisphere. Circulation around this high produces the southeast trades which blow over the CORAL SEA with great constancy for most of the year. The trade wind circulation is occasionally interrupted by the passage of a cold front which has moved off the Australian continent.

Weather associated with such a cold front follows the classic pattern--towering cumulus type clouds, showers, and squalls, gustiness

*Encyclopedia Americana 1946, Vol. 7, p.678

giving way to fairly rapid clearing behind the front. As the front gradually slows down and reaches its northernmost limit in the vicinity of 8° S to 12° S, the related weather no longer follows the usual cold front pattern. The band of bad weather is no longer confined to a narrow area along the front, but may cover a zone from 50 to 150 miles wide. Then it often happens that the trade winds will weaken and the front will move back to the south under the influence of a stronger circulation north of the front.

In its movement to the south, this front has most of the characteristics of a conventional warm front—altocumulus and altostratus clouds, lowering visibility, and a widespread area of precipitation. Towering cumulus type clouds, accompanied by showers and marked gustiness may also be present in the region of maximum convergent activity along the surface front.*

The direction of the wind is of importance in any naval operation but it is particularly important in operations wherever aircraft are used as a major weapon and where aircraft carriers are part of the force. This is because a carrier or carrier task force on offensive operations may advance towards the enemy freely, provided that the wind is blowing from the enemy. This gives the carrier task force Commander increased freedom of action in determining the best time for action. However, should the wind be blowing towards the enemy, the carrier or carrier task force will find its freedom of action seriously curtailed and its expenditure of fuel and time operating in the direction of the wind excessively high, thus necessitating frequent refueling.

The prevailing winds, strategically speaking, were from the southeast in the Coral Sea. This was generally advantageous to the Japanese as their carriers steamed into the wind; it was disadvantageous to the Allies on attack because they had to turn into the wind to launch and recover, and hence away from the attack course. However, on retirement it was favorable to the Allies and unfavorable to the Japanese if they both retired at the same time. As will be shown later, fuel consumption was of serious concern to the Allies; of somewhat less concern to the Japanese.

Japanese Command Relations

All of the Japanese Fleets as well as the naval air Fleets, with the exception of the China Area Fleet, were under the command of the Commander-in-Chief of the Combined Fleet. The Combined Fleet consisted of the mobile fleet and the 1st and 11th air fleets, all of which could operate anywhere in any area; and of certain area fleets which were responsible for and were restricted to geographical areas. The mobile fleets constituted the main

*The Battle of the Coral Sea, Aerology Section, Office of Chief of Naval Operations, April 1944.

striking force of the Combined Fleet; the area fleets were normally defensive in character and were generally unable to take any strong offensive action without assistance from the mobile fleets.* The 1st air fleet was composed of carrier based planes, whereas the 11th air fleet was composed of land based planes. The Commander, 4th Fleet who was also Commander South Seas Force, whose usual headquarters were at TRUK, but who was temporarily based at RABAU, was in overall command of the PORT MORESBY Operation. Assisting him and his naval forces, were naval air forces and an army South Seas Detached Force under the command of an army Major General for amphibious operations.** Diagram "A" shows the general area of operations.

All land based air forces in this operation were naval and were assigned to the 25th Air Flotilla, which was a subdivision of the 11th Air Fleet. The 25th Air Flotilla was under the operational control of Commander 4th Fleet.*** The 11th Air Fleet operated all shore based aircraft in the Pacific Ocean Areas. No army air forces were assigned at that time because they were trained for work on the Chinese Mainland, and because they were not trained in conducting joint operations with the naval air forces. As a result of that policy they were generally employed on the Continent and in the Homeland.****

Usually, in Japanese joint operations, unity of command was rare. Separate command for both army and naval units was the general practice. However, the PORT MORESBY Operation did have direct unity of command with a naval officer (Vice Admiral) in command. A naval officer (Rear Admiral) was in direct command of all invasion forces and an army officer (Major General) was in command of army units for the occupation of PORT MORESBY.**

The Japanese command structure evidently had many overall weaknesses and room for confusion, but there appears to have been no confusion in command in the Coral Sea Action, for all forces engaged were naval forces and all were under the overall command of naval officers. This is to be contrasted with the Allied organization, which will be discussed later, but which had a divided command responsibility.

Information Available to Japanese Commander

The Japanese Commander knew that the strength of the land-based American air force in the Australian area had been increased and that it probably numbered 200 first-line planes. This information was reasonably

*JAPAN-NAVAL ORGANIZATION, Change No. 11 to ONI 49.

**Full Translation of the PORT MORESBY Operation, May 1942-Vol.V; Doc. 18685 F(WDI).

***War Diary 25th Air Flotilla, Bismarck Area Base Air Force, 1 April, 11 May 1942, WDC 161725 Group 7, Item G, Page 1.

**** USSBS (Pac.) Answer to Military Analysis Div. Questionnaire No. 1.

correct insofar as operational aircraft were concerned. He also knew that the Allies had assembled considerable air strength in the PORT MORESBY, PORT DARWIN and TOWNSVILLE areas and that the aerial activity from these areas was consequently vigorous.*

He found it difficult to conceal his plans from the American reconnaissance planes. He considered the low altitude surprise attack methods of the heavy high speed armored American planes to be so very effective as to require him to provide increased aerial protection for his own forces.*

He was confident that the American task force existing in the CORAL SEA area was not large. He understood that the British Navy had apparently despatched toward the Australian area a composite force of destroyers, a light cruiser, two or three heavy cruisers and one battleship.**

He further believed that only one carrier and that, the SARATOGA, was in the area and that she was to be the nucleus of a striking force. He felt that the carrier force could not be larger than this because of the following facts: (a) the enemy had used carriers in the attack on the homeland on 18 April, (b) carriers had not been seen in the southern area since 10 March and finally, (c) Allied forces were only supposed to have a few carriers left.*** The actual task force which did appear, therefore apparently surprised him.

In this case, the Japanese commander might have run into even more serious difficulties than he did, had the four American carriers originally designated for this area arrived. It was a definite Allied capability to have more carriers than the SARATOGA, as had been shown at SALAMAU, but the Japanese chose to believe their information which was in error.

Also the Japanese were in error in assuming that the Allied forces would always have battleships with them. It was a capability and should have been so considered but, instead, it became a firm intention of the Allied forces. For that reason we shall see the Japanese reporting the sinking of one battleship of the California class, and the damaging of one battleship of the Warspite class, and one battleship, class unknown, in this action.

He believed that one or two Allied submarines were operating in the Bismarck area. This information was correct excepting that there were four Allied submarines there.*

He had noted that the transportation of airplanes and needed supplies to Australia was gradually increasing.

*Full translation of the Port Moresby Operation, May 1942 Volume V - General Headquarters Supreme Commander Allied Powers, May 1946.

**Full translation of the Port Moresby Operation, May 1942 Volume V - General Headquarters Supreme Command Allied Powers, May 1946, WDI-56, p.1

***Combat Report Battle of the Coral Sea, CruDiv 6, WDC 160997 p.1

Japanese Dispositions

The Japanese Navy, in cooperation with the Army, in carrying out the directive from the high command to secure a strategic position by occupying and securing the strategic areas to the south had directed the capture of RABAU, NEW BRITAIN; KAVIENG, NEW IRELAND; TSURUMI Air Base, NEW BRITAIN; LAE, SALAMAU, and PORT MORESBY, NEW GUINEA; SHORTLAND ISLAND; the ADMIRALTY ISLANDS; TULAGI and GAVUTU on FLORIDA ISLAND, and BUKA ISLAND, all in the SOLOMON ISLANDS.* Of the above bases, all had been captured by the Japanese, prior to the Battle of the CORAL SEA with the exception of PORT MORESBY, but TULAGI had only been occupied on 3 May and GAVUTU on 4 May. Nevertheless, seaplanes were operated from both of these latter bases during the battle. Japanese land-based aircraft operated against American forces from RABAU, where 50-60 Zero type fighters and 30 to 40 bomber planes were based. LAE furnished facilities for land-based fighters and bombers being staged against PORT MORESBY and also served as a base for patrol seaplanes involved in searches to the southward.**

The principal Japanese naval and air base in the general area was located at TRUK, with RABAU as an important secondary base.

In addition to the above bases, additional bases had been captured by the Japanese in the course of the basic operation. These were GREEN ISLANDS; the RUSSELL ISLANDS; WATOM, ULU and DYAU, ISLANDS; KIETA and BUIN on BOUGAINVILLE ISLAND and FAISI ISLAND in the SOLOMONS.

On 3 May the land and air forces in the Coral Sea area which were in a position to influence Allied operations were as indicated in Diagram "B-2".

This diagram indicates that the Japanese land and air forces had a rather wide distribution. As the land forces did not enter into the Battle of the Coral Sea excepting insofar as anti-aircraft batteries at TULAGI are concerned, the land forces will no longer be considered in this discussion. However, the location of the air forces is of intense importance.

Japanese Land-Based Aircraft

All land based aircraft of the Southern Areas were Navy airplanes of the 25th Air Flotilla, a part of the 11th Air Fleet. This air flotilla was formed as a Base Air Force on 1 April 1942 with Headquarters at RABAU. It consisted of the 4th Air Group, the MOTOYAMA Air Group, the YOKOSUKA Air Group, and later, in early April, of the TAINAN Air Group.*** The locations of the various subdivisions of this air flotilla were not permanently fixed but were moved as the situation demanded. This was done not only to insure adequate search of the more important areas, but also to insure that the bombers and fighters might be more effectively used.

*Full Translation of the Landing Operations of the Strategic points of the BISMARCK and SOLOMON ISLANDS. SCAP-ATIS Doc. 18665A 5/22/48

**War Diary of 25th Air Flotilla-1 April to 11 May 1942, WDC 161725

***War Diary of 25th Air Flotilla, WDC 161725, Grp.7-Item 7G

In addition, dispersion of forces was provided as a defense against air attack.

This use of Navy land based aircraft rather than Army land-based aircraft is of especial interest. It is believed that a great share of the credit for the rapid Japanese advances in the early days of the War was due to the Navy's use of her own aircraft both land and ship based in amphibious operations and in reconnaissance, air cover, and bombing operations. It will be shown later that the Allied Naval forces in the Coral Sea relied primarily on Army land based aircraft for these same operations. As a result, CTF 17 appears to have had little information as to the nature of the air operations being conducted by the Army.

In view of the suspected presence of an enemy striking force, the following assignment of aircraft, as of 25 April, was made:

Base	<u>TAINAN AIR GROUP</u>	<u>4th Air Grp.</u>	<u>MOTOYAMA Air Grp.</u>	<u>YOKOSUKA Air Grp.</u>
	Type 96 Ship-board fighters (Claude 14)	Zero Ship-board fighters (Zeke 11)	Type 1 Land Att. Planes (Betty 11)	Type 96 Land Att. Planes (NELL 11)
				Type 97 Flying boats (MAVIS 11)
Vunakanau (Rabaul)	4	8	14	17
Rabaul	2	-	-	9
Rabaul	-	-	-	14
Lae	-	24	-	-
	<u>6</u>	<u>32</u>	<u>14</u>	<u>26</u>
				<u>14</u>

The exact disposition of these land based aircraft on the days intervening between the 25th of April and the 4th of May is not certain, but it is known that on the morning of the 4th of May the YOKOSUKA AIR GROUP was based with at least 12 flying boats at LAE. After receiving word of the attack on TULAGI these flying boats were dispatched on searches to the eastward upon the completion, of which, they returned to SHORTLAND ISLAND.* This, evidently, meant a change of operating base and was a sound change in view of the need for search in the areas south of TULAGI. The need for a change in relative position to support the reconnaissance objective was immediately apparent to the Japanese. The reason for going first to SHORTLAND Island and later to both SHORTLAND Island and TULAGI was because TULAGI

*War Diary of 25th Air Flotilla, 1 April to 11 May 1942, WDC 161725.

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*War Diary of 25th Air Flotilla, 1 April to 11 May 1942, WDC 161725.

was not safe on the 4th, in view of the Allied attack, and freedom of action was better obtained at SHORTLAND Island. Some evidence tends to show that all of these seaplanes operated from SHORTLAND Island for the following week, but this appears to be in error, as is indicated by the following assignment of aircraft as of 4 May:

	<u>TAINAN AIR GROUP</u>		<u>4th Air Group</u>		<u>MOTOYAMA AIR GRP.</u>		<u>YOKUSUKA AIR GROUP</u>
<u>Base</u>	Type Zero Shipboard Fighter (ZEKE 11)	Type 96 Shipboard fighter (CLAUDE 14)	Type 1 Attack Plane (BETTY 11)	Type 96 Land Att. Plane (NELL 11)	Type 97 Flying Boat (MAVIS 11)		
Rabaul	12	?	17	24	3		
Lae	6						
Shortland					3		
Tulagi					6 *		
	<u>18</u>	<u>?</u>	<u>17</u>	<u>24</u>	<u>12</u>		

The assignment of 6 MAVIS to TULAGI was logical inasmuch as this permitted searches of the vital areas to a radius of 600-650 miles to the southward of that base. This assignment permitted an adequate daily search of two 15° sectors and, probably, included the area between limiting bearings 165° and 185° from TULAGI. One MAVIS reportedly operating out of RUSSELL Island was shot down by a YORKTOWN combat air patrol at 0810 on 5 May in Lat. 14°-55 S, Long. 160°-07 E.*** Another was engaged and damaged in Lat. 15°-52' S and Long. 161°-25' E. at 1045 on 10 May by 71-P-2 on patrol from NOUMEA.*** These two actions took place between the limiting bearings indicated above and tend further to establish the fact that flying boats were operating from the TULAGI area on and after 5 May. On the other hand, it is possible that one of these planes may have been operating out of SHORTLAND, as the above action took place very close to the 600 mile radius from that base.

Japanese Search Areas

Search areas were established on 1 April as follows:

*War Diary of 25th Air Flotilla, 1 April to 11 May 1942, WDC 161725.

**Action report USS YORKTOWN, Serial 054, May 11, 1942.

***War Diary USS TANGIER (AVS) 10 May 1942

<u>Patrol</u>	<u>Base Point</u>	<u>Limiting Bearings</u>	<u>Distance</u>	<u>No. of Aircraft</u>
P	RABAU	45°-75°	600 miles	2
Q	RABAU	75°-105°	600 miles	2
R	RABAU	135°-165°	600 miles	2
Y	LAE	130°-160°	600 miles	2
Z	LAE	160°-190°	600 miles	2

Shortly afterward, and prior to the 25th of April, an additional patrol area called the KOO sector was established as indicated below:

<u>Patrol Area</u>	<u>Base Point</u>	<u>Limiting Bearings</u>	<u>Distance</u>	<u>No. of Aircraft</u>
KOO	RABAU	170°-210°	650 miles	3+

The disposition of forces between 1 April and 4 May shows nothing but fighters based at LAE, and other evidence tends to indicate that no other planes were based at that field at that time. The SALAMAU field was too small for heavy aircraft.** It is therefore reasonable to assume that the searches from LAE were conducted by MAVIS flying boats. Inasmuch as these flying boats were not operating from LAE during the Coral Sea Operation after 4 May, it is considered that the sectors from this point of origin were probably not searched after that date. The KOO sector, however, covered a considerable portion of sectors Y and Z and may possibly have been provided to cover this eventuality.

The objective of these searches was the protection of own forces thru reconnaissance and shadowing to locate and trail any enemy forces in the area.***

In view of the above objective it is not considered that these searches were the best that could have been made with the planes available as they could scarcely cover the area adequately, especially in view of the weather at this time. The Japanese had ample planes and pilots, and, if this area had been given the strategic importance it merited, additional planes, if necessary, could have been supplied. It will be noted that searches covered five 30° sectors with two planes assigned for each sector and one 40° sector with three planes assigned. There is no information available on the Coral Sea searches, but Japanese diagrams for

*War Diary of 25th Air Flotilla, 1 April to 11 May 1942, WDC 161725.

**USSBS (Pacific Naval Analysis Division Interrogation of Japanese Officials, Nav. No. 97.

***War Diary of 25th Air Flotilla, 1 April to 11 May 1942, WDC 161725.

other areas indicate that the planes usually went out and, after moving along the arc to cover the radius of visibility, returned directly to the base. No radar equipment was installed in Japanese planes at this time.

In addition to the land-based aircraft and patrol planes the Japanese used seaplane scouting units, composed of short range reconnaissance single float bi-planes, either type Zero (PETES) or type 95 (DAVES) or both, which operated from tenders or from shore bases established by tenders. These units were employed to augment the normal searches in use; to establish advanced bases for providing air search of an area not otherwise searched; and to provide air cover for surface forces. The Japanese realized, in this connection, that the air cover provided by the small carrier SHOHO for the Port Moresby Invasion Force was not adequate and assigned two seaplane tenders, the HIJIRIKAWA Maru and the KAMIKAWA Maru with their attached aircraft to that duty to augment the SHOHO's aircraft. Both of these tenders were at DEBOYNE on May 6th.*

The weather conditions in this area were generally good excepting when a cold front passed over it. As Japanese practice was, apparently, on hitting a bad weather area to retire to base, this naturally lessened the value of the searches and assisted in making it possible for Allied forces to strike without warning.

Japanese Deployment Naval Forces

The strategic deployment of the Japanese forces at the time of the Battle of the CORAL SEA was in furtherance of the basic plan to seize bases farther south for protective purposes.

It will be apparent that this deployment consisted of five surface groups, supported by land based aircraft, tender based aircraft and submarines, and that each group proceeded towards its destination more or less independently. There were evidently two operations scheduled, one, a minor one and designed primarily to obtain a base for air reconnaissance, the capture of TULAGI—the other, a major one, the capture and occupation of PORT MORESBY by sea.

These groups were moving southward under the cover of land based aircraft, as well as of patrol and float planes. The Japanese search doctrine appears to have been to accomplish all aerial reconnaissance through medium bombers, flying boats (patrol planes), float planes, and ship-based aircraft not carrier based. They seldom used their carrier planes for search but instead used the above planes, thus leaving their

*Operation MO and the Battle of the CORAL SEA. Combat Report No. 1, South Seas Force, MO Occupation Force (Combat Report No. 7, CruDiv 6) Period 25 Apr. 1942 to 11 May 1942.

carrier based planes available to make up a maximum strength striking force, since none of the carrier planes need be used for scouting.* There were occasions, however, when the Japanese found urgent need for search by carrier planes and this was the case during the Battle of the Coral Sea.

This practice of using land based aircraft to cover the area in which carriers are operating is sound and is the logical method to be employed, so long as it continues to be adequate and can be relied upon to furnish the information required for the security of the forces involved. In this case it was not adequate for either side, for the Japanese Striking Force and TF 17 were each able to reach their launching position without warning.

The first operation was the occupation of TULAGI. At the time of its occupation on May 3--it had been evacuated by the Australians on May 2--the deployment was as indicated in Diagram (C). It will be noted that at the moment the TULAGI Invasion Force had occupied TULAGI, about 0820, May 3, other Japanese forces moving south were located about as follows from west to east:

- (a) The PORT MORESBY Invasion Force was at anchor in RABAU, L,
- (b) The Covering Force was over 150 miles to the westward of TULAGI and south of NEW GEORGIA Island,
- (c) The Support Force was in the same area and was 60 miles west of the Covering Force,
- (d) The TULAGI Invasion Force was at TULAGI,
- (e) The Striking Force was about 650 miles northwest of TULAGI and on a southeasterly course, and
- (f) The Submarine Force location is not known exactly, but all six submarines torpedoed a Greek ship off NOUMEA on 7 May.**

The composition of these forces is shown in Appendix "I".

It should be noted that whereas the objective of the TULAGI and PORT MORESBY Invasion Forces was solely "capture and occupation", the objective of the other forces was "protective". The Striking Force was a typical highly mobile carrier force with two first line carriers,

*Tactics employed by Japanese Air Forces in attacks on Naval and Merchant Shipping; Op-35 A.I.D. A5 Par 1 of Aug. 1943

**War Diary USS TANGIER (AV-8) 7 May 1942

the SHOKAKU and ZUIKAKU, and with a screen of two heavy cruisers, the MYOKO and HAGURO and six destroyers, the SHIGURE, YUGURE, ARIAKE, SHIRAURO, USHIO, AKEBONO; the Covering Force was a surface force of four heavy cruisers, the AOBA, KINUGASA, KAKO and FURUTAKA plus a small type carrier (CVL), the SHOHO, which is an ex-submarine tender and ex-oiler, and one destroyer the SAZANAMI; the Support Force was a light force of two light cruisers the TENRYU and the TATSUDA with gunboats, minesweepers and auxiliaries; the Submarine Force was primarily a submarine activity with six submarines, the RO-53, RO-54, I-22, I-24, I-28, and I-29, with two tenders, the ISHIRO and the HOYO-MARU. None of these ships were equipped with radar and one of the carriers were fitted with "homing" devices.

The tasks assigned these combatant forces by the Japanese were as their names imply:

(a) Striking Force

- (1) To cover PORT MORESBY Invasion Force.
- (2) To destroy Allied Fleet (which might appear on the scene)
- (3) To destroy by air raiding operations on TOWNSVILLE, AUSTRALIA, and American planes and ships being delivered there. (Actually, this task was left to the discretion of the Striking Force Commander)

(b) Covering Force (Referred to by Japanese as PORT MORESBY Principal Unit of Main Body)

- (1) To cover operations of both TULAGI and PORT MORESBY Invasion Forces.

(c) Support Force

- (1) To support SOUTH SEAS Units. (This embraces both the TULAGI and PORT MORESBY Invasion Forces)

(d) Submarine Force

- (1) To destroy enemy striking forces which come into the Coral Sea.
- (2) To destroy enemy shipping.
- (3) To reconnoiter*

*Full Translation of the PORT MORESBY Operation, May 1942-Vol. V, Dec. 18665 (WDI 56)

The Striking Force was designed to meet the threat of the Allied light carrier task forces from the south as well as land based aircraft from Australia. It will be remembered that Allied carrier task forces, which had heretofore operated in the CORAL SEA, had, with one exception, consisted of one carrier only. In this one exception, two of these carrier groups had been employed in the attack on LAE and SALAMAU. The Japanese appear to have believed that this type of a single carrier task force would continue to be employed by the Allies and that they would meet one group with the SARATOGA only. They, therefore, formed a carrier task force of two carriers, which was designed on the premise that the offensive power of the two similar carriers is much greater than twice that of one carrier engaged in a similar operation.

The Covering Force was evidently designed to cover the landings at both TULAGI and PORT MORESBY with priority to the latter operations and to provide aerial security for the PORT MORESBY Invasion Force. Although the SHOHU was a 25 knot CVL, nevertheless, so long as she remained as part of the Covering Force, she restricted its freedom of action, as the AOBA class were 33 knot cruisers. However, she was very vulnerable and was therefore placed with the Covering Force for protection. She could provide anti-submarine patrols, air searches for limited sectors, and her planes could be of considerable value, both in defense of the cruisers and transports, and in support of the operation at PORT MORESBY. The lone destroyer, which is believed to be a plane guard for the SHOHU, is considered entirely inadequate for destroyer screen. The fact that only one destroyer was provided for these cruisers suggests that already the Japanese were finding that they did not have sufficient forces adequately to support their many tasks. Later in the war, vessels not adequately protected were usually destroyed by Allied submarines.

The forces assigned this group were inadequate against Allied forces believed to be in the area, unless used in concentration with carrier forces and land based air forces. Should this group not be employed with carrier forces or with adequate land based air, it could be destroyed piecemeal by strong enemy raiding forces. Also, without a destroyer screen it was subject to submarine attack even though air cover thru an inner air patrol was provided. A study along this line by the Japanese would probably have indicated to them the necessity for mutual support and concentration, and the timing, at least, of the arrival of the various units in the South Sea area might have been changed. This is especially so regarding the earlier arrival of the Striking Force. As it was, failure to do this adequately caused the loss of the SHOHU.

The Support Force was designed to assist in escorting both the TULAGI and PORT MORESBY Invasion forces as well as to support landing operations by gunfire, minesweeping and kindred activities for that type of operation, and appears to have been adequate for the purpose, although the lack of

destroyers left the force vulnerable to submarines.

The Submarine Force was primarily a submarine activity with necessary tenders. The tasks assigned this force were doubtful of accomplishment except in a most minor way, because it is almost impossible for six submarines adequately to reconnoiter a large area or to so cover an area as to insure the destruction or damage of enemy striking forces which come into the area. Why the Japanese did not use more submarines to implement the relatively sketchy air reconnaissance, is not known. As will be shown later, a submarine contact by a plane of TF 17 caused CTF 17 to consider himself discovered by the enemy. Actually, no Japanese submarine reported TF 17. This would indicate that more submarines were required if the area was to be properly reconnoitered.

The Striking Force was far distant from TULAGI on 5 May. It was transporting 18 planes (Zero type) from TRUK to RABAU for the Tainan Air Group, and has chosen the morning of that day to transfer 9 of them. The remaining 9 were transferred on the morning of the 4th. The dotted lines show where these transfers were made. The Striking Force also fueled on the morning of the 4th. Why the Commander of the Striking Force chose to transfer his planes at this time is not apparent. Copies of his orders state that the Striking Force was directed to directly support the South Seas Units, one of which was the TULAGI Invasion Force. As the TULAGI operation was scheduled for early morning of May 3rd, it appears that his location violated the factors of security and concentration. He was certainly not in position to cover the TULAGI Invasion Force from any direction excepting from the north, which was the least probable direction, as enemy information showed that Allied surface and carrier forces were operating in the southern part of the CORAL SEA.

It is possible that either Commander 4th Fleet or Commander Striking Force had decided that there would be no attack on TULAGI by the Allied forces, and therefore the Striking Force was being held back in the area north of TULAGI and beyond the reach of Allied planes, until the Port Moresby Invasion Force had left RABAU. Then the Striking Force would head south and west at high speed to catch any Allied carrier force which might attempt to interfere with the PORT MORESBY attack.

The Japanese apparently did not weigh very heavily the Allied capability of attacking TULAGI. Instead, they appear to have decided that the Port Moresby Invasion Force would be to sole objective. Had they considered the Allied capability of attacking their forces at TULAGI and had they positioned their forces to counter this action, they might have caught CTF 17 with reduced forces.

The Covering Force evidently covered TULAGI from the west at a distance of about 150 miles, because of its dual covering function and because

of the importance of the PORT MORESBY operation. The Japanese apparently did not think that TULAGI was sufficiently attractive to the Allied Commander to warrant attack in force, and therefore the Covering Force remained at such a distance from TULAGI as would permit it to move to the support of TULAGI by air immediately, and yet, at the same time would permit it to return to PORT MORESBY at an economical speed and, in time to cover the Port Moresby Invasion Force. As a matter of fact, the Covering Force actually covered the TULAGI landing by employing three (3) carrier fighters and attack planes in that operation.* This Covering Force would have been of little value against a fast carrier task group of the type employed by the Allied forces, unless employed in coordination and concentration with a Japanese fast carrier task force or with land based air in strength. In this connection, it should be stressed that concentration at sea today does not mean necessarily that ships must be within visual signal distance of each other, although with radio silence in effect this factor is worthy of serious consideration. It does mean, however, that they must be so disposed as to be able to coordinate their effort with other friendly units in the most effective manner.

JAPANESE PLAN

It will be noted from the chart of air searches that the Australian land based air searches covered the Solomon Sea, the Solomon Islands and limited portions of the Coral Sea. The searches across the Solomon Islands reached their maximum radius about 45 miles beyond the eastern shores of those islands. The Japanese apparently knew that. So they sent the Striking Force south on courses which carried it just clear of these searches and clear of the coast watchers. Thus, unless discovered by a submarine, this force would be an unknown force of great strength which would be available for a sudden strike against any Allied forces which attempted to interfere with either the PORT MORESBY Operation or the TULAGI Operation, although the latter operation did not seem important enough. It is, of course, a fact that if it is desired to bring an enemy into a vulnerable position, something he values, such as PORT MORESBY, must be threatened and he must feel compelled to expose himself in order to protect it, or, an opportunity must appear to be presented to the weaker adversary to inflict a relatively greater loss on the stronger than he expects to suffer himself. Such an opportunity would appear to have been presented by TULAGI.

The Japanese thought that the Allied Commander would be aware of the movement of the PORT MORESBY Invasion Force and would send a force into the Coral Sea to intercept it.** They planned that, should an Allied force interfere, they would destroy it by a single or double envelopment or both. They estimated that this force would come into the Coral Sea between SAN

*SHOHO Action Report #7, of #6 dated May 7, 1942, WDC #160465

**Supplemental Report-Truk-Naval & Naval Air Field Team #3, USSBS.

CRISTOBAL Island and ESPIRITU SANTO Island in a southwesterly direction and would then head west to a position south of PORT MORESBY. They seem to have overlooked the importance of TULACI to the Allied Commander, as air searches from there would affect the Allied freedom of action in the CORAL SEA by reconnoitering much farther to the south.

In this estimate they were once again in error. In the first place there was one carrier force, TF 17, in the southern part of the CORAL SEA at the time of this estimate, which carrier force had returned to the CORAL SEA from TONGATABU on May 1 after 7 days' upkeep and provisioning. It had proceeded via a course south of the NEW HEBRIDES. In the second place, there was another carrier force, TF 11, which had passed between EFATE and EROMANGA or about 300 miles south of where expected by the Japanese, and which had been directed to join TF 17 on May 1. Their estimate that Allied forces would know of the PORT MORESBY force and would endeavor to stop it, proved to be correct. Their estimate of relative position was, however, in error and caused the failure of the Japanese plans. Had the Japanese maintained the thought of the Allied objective and viewed it from the conception of position, means available and opposed and freedom of action, they would have probably arrived at the enemy capability of striking from the south where his support and hence his freedom of action lay, rather than from the east where he might readily be discovered by Japanese aircraft and submarines. They might have expected also that he would be in greater strength than heretofore and under the cover of Allied land-based aircraft. The capability of approach from the east should have been considered but should have been given lesser importance than that from the south.

However, the Japanese were hopeful of their trap. They were always thinking of a Cannae -- of a holding operation with weak forces in the center and of a double encirclement with strong forces on the enemy's weak flanks.* They attempted this at LEYTE GULF where their Navy was destroyed piecemeal, and they attempted it at the CORAL SEA, where, as will be shown later, the weaker force refused to be held. They often thought in terms of land operations, and while such thought is valuable, it must be pointed out that naval warfare and land warfare are not similar and that naval operations based on land conceptions often fail because of this dissimilarity. They, apparently, never thought in terms of a naval victory but rather of a land victory. There was no talk of a TSUSHIMA or of a NILE or of a TRAFALGAR. The reason for this is apparent when one considers the Cannae idea of envelopment. And yet at the NILE Nelson enveloped the French. And at TSUSHIMA and at TRAFALGAR the enemy fleet had been destroyed!

After the Battle of the CORAL SEA, the Japanese High Command went at great lengths to explain to the Fleet how the Cannae could have been effected.

Had they been a little more realistic they might have decided that their front was too loose and presented an opportunity to an alert and powerful

*Japanese Striking Force Tactics "Know Your Enemy", 15 September 1944.

enemy for quick and destructive blows on isolated weak detachments. Had they done this correctly they would have drawn their forces more tightly together and thus insured a more adequate defense of their invasion forces. .

Allied Command Relations

The entire Pacific area had been designated as an area of U.S. strategic responsibility. This area had for this purpose been divided into three large areas: the Southwest Pacific, the Southeast Pacific and the Pacific Ocean; the latter being further subdivided into the North, Central and South Pacific areas.

The boundaries of the Southwest Pacific area, and those of the South Pacific area, are of considerable interest in the study of the Coral Sea engagement for it was within these areas that the operations in connection with this action were conducted. The pertinent portions of the northern and western boundaries of the Southwest Pacific area were: from Longitude 130° East along the Equator to Longitude 165° East; thence south to Latitude 10° South, and southwesterly to Latitude 17° South, Longitude 160° East, thence South. The South Pacific area was bounded on the West by the Southwest Pacific area and on the North by the Equator.*

General MacArthur had been made Supreme Commander of the Southwest Pacific Area and had formally assumed command of this area on 18 April.** At this time he had been directed to, among other tasks -

- (a) Check the enemy advance toward Australia and its essential line of communications by the destruction of enemy combatant troop and supply ships, aircraft, and bases in Eastern MALAYSIA and the NEW GUINEA-BISMARCK-SOLOMON Island Region.
- (b) Protect land, sea and air communications within the Southwest Pacific Area and its close approaches.
- (c) Support the operations of friendly forces in the Pacific Ocean Area and in the Indian Theater.***

The South Pacific area, including as it did, NEW ZEALAND, NEW CALEDONIA, the LOYALTY Islands, the NEW HEBRIDES Islands and the SANTA CRUZ Islands was set up as an area command under Admiral Nimitz as Commander-in-Chief, Pacific Ocean areas as well as Commander-in-Chief, Pacific Fleet. At the same time, Admiral Nimitz was directed to appoint a Commander of the South Pacific area who, acting under his authority and general direction, would exercise command of the combined armed forces which at any time might

*CINCPAC Operation Plan 25-42.

**Army Air Forces in the War against Japan 1941-1942. Published by Headquarters Army Air Forces 1945.

*** Review of War in Pacific Army-Navy Staff College-Captain T.H. Robbins, USN. 1945

be assigned that area.

Admiral Nimitz as Commander-in-Chief, Pacific Ocean areas assigned certain tasks among others which had been assigned to himself, to the Commander, South Pacific areas for execution. Among these were to -

- (a) Hold the island positions between the United States and the Southwest Pacific area necessary for the security of the lines of communication between these regions; and supporting naval, air and amphibious operations against the Japanese forces.
- (b) Support the operations of the forces in the Southwest Pacific areas.
- (c) Protect the essential sea and air communications.*

At the time of the Battle of the Coral Sea, Admiral Nimitz had not yet assumed command of the Pacific Ocean areas although he did assume that command at 1100, May 8th** when, as it happened, the battle had been almost terminated. He exercised command over the naval forces in the Pacific at that time, by virtue of his authority as CINCPAC and it was, apparently, as CINCPAC that he controlled the carrier task forces in the Coral Sea.

It should be apparent, from the above, that CTF 17, likewise, did not have any control over the Army Air Forces flying in his support, over the Coral Sea Area.

Thus there existed a divided command responsibility for naval operations in the Coral Sea. On the one hand was the Commander, Southwest Pacific area who exercised no control over these operations, but who was called upon to support them whether or not they contributed to his own plans; on the other hand, there was the Commander-in-Chief, Pacific Fleet and his task force commander CTF 17 who exercised no control over the supporting forces but who had full control over their own naval forces. A very high degree of coordination was, therefore, required within the Southwest Pacific area in order that the naval operations within its boundaries by outside forces might be successful.

Another question of divided command responsibility had arisen with the Australians concerning British or Australian command of combined forces in the South Pacific area. It was decided that when an American carrier unit was operating with Australian forces, the senior American naval officer would be in command because of the nature of carrier operations; otherwise when the naval forces of the two powers were operating together, and no carrier operations were involved, the senior officer of either power would be in command.***

*Review of War in Pacific, Army-Navy Staff College, Captain T.H. Robbins, USN, 1945.

**CINCPAC War Diary, May 1942.

***CINCPAC War Diary, April, 1942.

be assigned that area.

Admiral Nimitz as Commander-in-Chief, Pacific Ocean areas assigned certain tasks among others which had been assigned to himself, to the Commander, South Pacific areas for execution. Among these were to -

- (a) Hold the island positions between the United States and the Southwest Pacific area necessary for the security of the lines of communication between these regions; and supporting naval, air and amphibious operations against the Japanese forces.
- (b) Support the operations of the forces in the Southwest Pacific areas.
- (c) Protect the essential sea and air communications.*

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*Review of War in Pacific, Army-Navy Staff College, Captain T.H. Robbins, USN, 1948.

**CINCPAC War Diary, May 1942.

***CINCPAC War Diary, April, 1942.

INFORMATION AVAILABLE ALLIED COMMANDERS*

The American commander knew that the Japanese had occupied bases at the following places; RABAU and GASMATA, NEW BRITAIN, WATOM, DYBAUL and ULU Islands, KAVIENG, NEW IRELAND, BUKA Island, KIETA and BUIN on BOUGAINVILLE Island, FAISI Island, and SALAMAUA and LAE in NEW GUINEA.

He also knew that the majority of these bases included airfields or seaplane operating facilities as indicated below;

- (a) RABAU had two operational airfields used by both fighters and bombers and a third field was under construction. Seaplane moorings and a beaching ramp were located on the waterfront.
- (b) GASMATA had an aerodrome used as an advanced field by RABAU.
- (c) KAVIENG had an airfield used by bombers.
- (d) KIETA had a land plane field which was not satisfactory for military operations.
- (e) FAISI Island had had buoys installed in the harbor and might be used by patrol seaplanes.
- (f) SALAMAUA had a harbor which was used by patrol seaplanes, and an aerodrome suitable for light bombers and fighters, which was not being used.
- (g) LAE had an aerodrome which was being used by fighters and bombers.

He estimated that the shore based aircraft strength in the LAE-RABAU area to consist of the following;

RABAU: 12 VF - 20 VB - 17 VP - 4 small seaplanes
LAE: 30 VF - 15 VB - 4 VP

The aircraft available in this area during the period under discussion varied somewhat but their dispositions for April 25 and May 4, as listed by the Japanese, are as follows;

25 April

RABAU: 14 VF - 40 VB - 14 VP
LAE: 24 VF

4 May

RABAU: 12 VF - 41 VB - 3 VP
LAE: 6 VF

*CTF 17 Operation Order No. 2-42, Annex "A"

SHORTLAND:
TULAGI:

3 VP
6 VP

This tabulation does not include, however, a detachment of small sea-planes from the KIYORAWA MARU that were shore based at RABAU on May 1 and that may have moved up to TULAGI with the forces that occupied that base. The patrol planes were based at LAE on the morning of the 4th, but moved out on a search to the eastward after receiving word of the YORKTOWN'S strike on TULAGI and did not return to LAE.

He knew that RABAU was the principal port for convoys and that a large number of transports and supply ships were massing in this port apparently for a movement toward Southeast NEW GUINEA. Few combatant ships had been noted there recently, although it was known that one submarine tender and three or more submarines had been at RABAU in recent days. He considered that most Japanese naval units remained at sea.

He had intelligence that appreciable Japanese naval strength was concentrated near TRUK or was en route southward. Included in these units were reportedly three carriers. Among these were the carriers ZUIKAKU and SHOKAKU and four destroyers of Cardiv Five and the cruisers MYOKO and HAGURO. Numerous other destroyers and the carrier RYUKAKU were also reported to be in the TRUK area. This information was generally correct. However, the SHOHU which was in the area was probably mistaken for the RYUKAKU.

He had information that the Japanese would commence major operations in the RABAU area about April 28th with the objective of capturing and occupying PORT MORESBY by a seaborne invasion or of occupying the lower SOLOMONS or both. He felt that the increased tempo of air attacks on HORN Island, PORT MORESBY and TULAGI confirmed these intentions. This information proved to be correct.

ALLIED DISPOSITIONS

The Allied Navy in cooperation with the Army in carrying out the directive from the high command to check further advances by the enemy in the NEW GUINEA-SOLOMONS area had established bases in TONGATABU, FIJI ISLANDS; NOUMEA, NEW CALEDONIA and EFATE, NEW HEBRIDES,* while the Army Air Forces had established operational airfields in AUSTRALIA at TOWNSVILLE, CHARTERS TOWER, CLONCURRY, and DARWIN. HORN Island, just north of Cape YORK PENINSULA, had been developed as a staging field for aircraft proceeding to and from the airfield at PORT MORESBY, NEW GUINEA. The airfields

*CTF 17 Operation Order No. 2-42, Annex "C".

~~CONFIDENTIAL~~

at PORT MORESBY were small, with insufficient dispersal areas and were frequently attacked by Japanese fighters and bombers. These fields were, therefore, used only as a base for fighters, and as a staging point for heavier planes en route to the NEW HEBRIDES-SOLOMON Island Areas.* The Australians had been operating a few Catalinas from GAVUTU Harbor at TULAGI but they evacuated that base on May 2, and all further air reconnaissance by Allied forces from this base ceased as of that date. An airfield was being constructed at TONTOUTA, NEW CALEDONIA and another for fighters and dive bombers was nearing completion at EFATE.**

NOUMEA possessed an excellent anchorage for ships of any draft and the harbor and all entrances except BULAN Pass were mined. A good landing field was in existence at TONTOUTA but, although some Army Air Force ground echelons and fighter aircraft were present, the field was not as yet support-int operational aircraft. Pending the completion of shore defenses and the activation of operational Army aircraft from TONTOUTA, NOUMEA was not considered a good anchorage for carriers.**

EFATE was in the process of being garrisoned and organized into a defended base.** Operating areas for PBY flying boats existed at White Sand Point and Neli Bay.

On May 3, the strategic location of Allied land bases and airfields in and around the Coral Sea area, which were in a position to influence Japanese operations, were as indicated in Diagram "B-2".

ALLIED LAND AND TENDER BASED AIRCRAFT

All land based aircraft involved in the Coral Sea operations were those of the Army Air Force of the Southwest Pacific Force located in AUSTRALIA and at PORT MORESBY. This force had, since early March, been in the process of organizing and making preparations for combat operations. Remnants from the Philippine and Java operations had been consolidated with units arriving from the United States, but a shortage of qualified Air Corps personnel extended down to the smallest unit. The operational units of the Army Air Force in this area as of May 1, consisted of the 5d Light Bombardment Group, the 22nd Medium Bombardment Group, the 19th Heavy Bombardment Group, the 8th, 35th and 49th Fighter Groups and Flight A of the 8th Photographic Squadron.*

A unit of the RAAF had been operating out of TULAGI with Catalina flying boats until the 2nd of May. This unit had been engaged in reconnaissance missions that covered the SOLOMON Island area to KIETA and the sea area to westward of TULAGI. Two of these planes attacked FAISI on the 11th of April

*AAF Historical Narrative "Army Air Forces in the War against Japan, 1941-42"

**CTF 17 Operation Order No.2-42, Annex "C".

**DISPOSITION OF ALLIED SHORE AND TENDER BASED AIRCRAFT
AS OF 1 MAY 1942**

BASE	3rd Bombardment Group (L)		22nd Bombardment Group (M)		19th Bombardment Group (H)		8th Fight- or Group (I)		35th Fight- or Group (I)		49th Fight- or Group (I)		Photo- graph- in Squad Flt. A		RAAF		VP-71		TOTAL
	B-25	A-24	A-20	B-25	B-26	B-17	P-39	P-39	P-39	P-40	P-40	P-40	P-40	P-40	PBY-5	PBY-5	PBY-5	PBY-5	
CHARTERS TOWER	19	19	14																82
TOWNSVILLE AREA				12	80		80												148
CLOUCUREY						48													48
PORT MORESBY							80												80
HORN ISLAND																			00
DARTON											90								90
SYDNEY									100										100
TULAGI															80				8
MOUREA																80			8
TOTAL	19	19	14	12	80	48	100	100	100	90	90	4			80		8		498

NOTES: The figures on Army Aircraft represent the best estimate of the total available as indicated in "Army Air Forces in the war against Japan 1941-1942" and in the "Army Air Forces Statistical Digest." No attempt has been made to differentiate between Operational Aircraft and those under Maintenance.

* Two fighter squadrons.

** TULAGI evacuated and these planes withdrawn on 2 May.

*** Six additional PBY-5's from VP-72 arrived the afternoon of 4 May.

Table 1

and again on the 27th of April. It is therefore assumed that this unit had at least 6 Catalinas during the period that it occupied TULAGI. There is no information as to how many of these Catalinas, if any, were operational when TULAGI was abandoned on 2 May. CINCPAC reported one PBV lost from enemy action at 0217Z/4 in Lat. 08-00'S, Long. 155°-00'E. This, coupled with the fact that one PBV was destroyed at its moorings at PORT MORESBY, indicates that some PBV's were at times being operated from or staged through this latter base, and that the remaining PBV's at TULAGI may have gone to PORT MORESBY and conducted searches of the SOLOMON Sea Area from that base.*

The maximum number of bombers and fighters available in the Australian area were assembled in Northeast Australia for use against the Japanese naval forces prior to and during their expected movement to the south. In conjunction with the reconnaissance missions being flown, these aircraft continued their attacks on enemy air installations at LAE, GASMATA and RABAU and against shipping present in these same general areas.**

The TANGIER was stationed at NOUMEA with six PBV-5 patrol planes but this number of patrol planes was increased to twelve, and, finally, to eighteen before the completion of the CORAL SEA operations.***

The exact number of land based aircraft available to the Allied command during the Coral Sea operation is not known, but Table 1, as qualified by the explanatory notes provides the best estimate of the situation as it existed on 1 May.

The total number of army aircraft available in the AUSTRALIAN area as shown by the foregoing table is all out of proportion to the few missions flown during the period involved. Many of these planes may not have been as yet placed in an operational status. The Army Air Force, in commenting on the difficulties encountered by the 19th Bombardment Group during the latter part of April 1942, stated: "Unfavorable weather, lack of spare parts and tools, and the "burned out" condition of combat crews after the Philippine and Java action, all affected the operational efficiency of the group. Patrol and bombing missions were executed almost daily, despite the fact that squadrons were sometimes able to get only one plane in the air."** These facts all tend to indicate that, of the total of 498 aircraft available, probably only about 200 or 40% were operational for support of the CORAL SEA operations.

In addition to the above difficulties experienced by the Army Air Force due to weather, material, and fatigue of crews, another most vital condition

*CINCPAC War Diary, May 1942.

**AAF Historical Narrative "Army Air Forces in the War against Japan, 1941-42"

***TANGIER's War Diary, May 1942.

existed which made all other difficulties appear unimportant. This was the disadvantageous position in which the Allied Air Forces found themselves once they were forced to give up their bases in the SOLOMONS and the other islands to the north. Owing to the failure of the Allied Ground Forces to hold TULAGI and other bases in the SOLOMONS, where airfields might have been constructed or patrol planes based, the Allied Air Forces were forced back on the Australian mainland whence their searches of the islands to the north had generally to be effected by staging through HORN Island and PORT MORESBY. This required many planes, much gasoline and many flying hours on the part of the weary pilots. The ability of the Air Forces to search the CORAL SEA was also seriously curtailed, because the distance from Australia to the Solomons was so great as to deny adequate search excepting with a large number of long range planes, which planes were normally not available. The lack of bases was seriously felt, and brings forth the important fact that air power is as yet limited in range, and if it is to be fully effective it must be provided with suitable bases from which search and combat planes may operate from advantageous relative positions.

Allied Search and Reconnaissance

Commander, Southwest Pacific Area, in preparation for the support of TF 17 during its operations in the CORAL SEA, informed CTF 17 that he had modified his previously existing search plans in order that he might cover the areas indicated in diagram B-1. Each area was to be covered daily with the exception of area HYPO which was to be covered twice each day. The number of planes to be used for search in each area is not known, but in view of the few planes available, it is assumed that, in general, the reconnaissance to be conducted was intended to be primarily a perimeter search covering only the vital areas of enemy activity and shipping concentration.*

This search plan was apparently again modified, however, to some extent for the actual operation. General MacArthur, in his report on air operations conducted in support of the naval forces in the CORAL SEA Battle, indicates that his search operations provided for a flank reconnaissance patrol of the area THURSDAY ISLAND, PORT MORESBY, RABAU, extensive reconnaissance of the general area of the SOLOMON Islands from NEW IRELAND southeast to the boundary of the Southwest Pacific Area, and the CORAL SEA area west of TULAGI. In addition, air patrols were conducted in the area from BUNA, southeast along the north coast of NEW GUINEA and the LOUISIADE Islands to the limit of range, then westerly along the south side of the LOUISIADES to PORT MORESBY. The zone off TOWNSVILLE was to be patrolled to a depth of 500 miles and normal patrols conducted across the mouth of the GULF of

*COMSOUWESPAC SECRET Dispatch 270840 of April 1942

CARPENTARIA and off the DARWIN Area.*

Diagram B-2 shows the areas being patrolled and reconnoitered by the Allied land and tender based aircraft as of May 1st. The methods employed in these operations, with the exception of those conducted from NOUMEA, are shown only in a general manner, due to lack of detailed information on the subject. The areas SALAMAU, LAE, MADANG, GASMATA, BUNA were frequently covered by photographic missions, armed reconnaissance missions, and by organized bombing and strafing attacks on the areas by bombers and fighters out of PORT MORESBY. In general, the reconnaissance of these areas continued throughout the operation, but the searches from TULAGI ceased as of May 2nd when that base was evacuated, and the searches conducted from NOUMEA were modified on May 5th to conform to the directive contained in Commander Task Force 17's operations order.**

A study of the numerous contact reports made by Allied aircraft from AUSTRALIA and PORT MORESBY for the period May 1st to May 8th shows that Commander Southwest Pacific area was placing considerable emphasis on his reconnaissance flights in the SOLOMON SEA included between limiting bearings 045° to 115° from PORT MORESBY for a distance of 480 miles. How many planes were actually involved and how often the reconnaissance flights were conducted is not known, but the continuity of contacts indicates at least daily searches for this period. With the single exception of the sector searched daily off TOWNSVILLE, there were no searches conducted in the CORAL SEA proper by aircraft from AUSTRALIA.

After May 1st, no air searches of the ocean areas to the east of the SOLOMON Islands were made by the RAAF from TULAGI nor by planes of the Army Air Force in AUSTRALIA nor at PORT MORESBY. The distances involved, and the lack of planes of suitable types, made it impossible for any such searches to be made by the latter forces.

As previously stated, the TANGIER was in NOUMEA tending 6 PBV-5 patrol planes. From May 1st to and including May 4th, she employed three of these planes on a daily parallel search along a median line 340° T. from NOUMEA for a distance of 700 miles using a scouting distance of 50 miles.***

This search was about the maximum that might be expected with the number of planes available, and an assumed radius of visibility of 25 miles. The planes available, however, were sufficient for only one patrol a day and, as will be apparent from Diagram "B-2", the search could not hope to insure the detection of Japanese units entering the CORAL SEA from the eastward around SAN CRISTOBAL Island or through any of the passages to the north of this Island. Had this search been conducted from EFATE or staged through EFATE where a seaplane operating area was available, the radius of search might have been extended to the northwest 180

*General MacArthur's secret dispatch AG 719 of 13 May replying to request from Army Chief of Staff for information on air operations during CORAL SEA BATTLE.

**TANGIER (AV-8) War Diary, 5 May 1942.

***TANGIER (AV-8) War Diary, 1-4 May 1942.

miles on the western leg to include TULAGI and 210 miles on the eastern leg to cover the areas 75 miles to seaward of the eastern coast of MALAITA Island. This would have increased the possibility of detecting enemy surface units entering the CORAL SEA from the eastward and would have probably actually resulted in contact with the Japanese carrier force on the 5th had the three-plane search been continued from EFATE on that date. Had the search been conducted from ESPIRITU SANTO Island it would have extended the radius even farther to the northwest to the tip of CHOISEUL Island and also provided coverage of 75 miles to the eastward of the SOLOMON Islands.

The TANGIER and her 6 patrol planes were assigned to Task Force 17 on 28 April, but did not receive Commander Task Force 17's operation order No. 2-42 until May 4th.* Up until this time, the Commanding Officer of the TANGIER was apparently ignorant of CTF 17's plans and appears to have been doing the best he could with the information and facilities available.

The preceding discussion shows that CTF 17 with Task Force 11 and 17, from the time of his entrance into the CORAL SEA on 30 April, was without adequate air coverage not only of the central and eastern areas of the CORAL SEA but also of those ocean areas to the eastward of the SOLOMON Islands that were so essential for his security and hence freedom of action. Later, discussion will show that this lack of air coverage, especially that to the eastward of CTF 17's position did not appear to give CTF 17 undue concern.

ALLIED DEPLOYMENT NAVAL FORCES

The strategic deployment of the Allied forces at the time of the Battle of the Coral Sea was in furtherance of the basic plan to check further advance of the enemy in the NEW GUINEA-SOLOMON area by destroying enemy ships, shipping and aircraft. It will be apparent that the forces in this deployment were two carrier task forces. Both of these forces were in the southern part of the Coral Sea and were fueling and reorganizing, more or less, independently. There were at that time, two prospective operations in view, one - to assist in preventing the Japanese planned invasion of PORT MORESBY--the other, to assist in preventing the extension of Japanese power into the lower SOLOMONS.

These two carrier task forces were, to a limited degree, furnished with information obtained by Allied land based and tender based aircraft which operated out of Australian airfields and out of NOUMEA and PORT MORESBY assisted by reconnaissance by the submarines of the Southwest Pacific Command. In view of the necessity for radio silence at sea, and

*TANGIER War Diary, May 19.2.

especially, in view of the fact that these Allied carrier task forces were definitely of the raiding type, it became necessary for the above land and tender based aircraft to operate by doctrine rather than by dispatch from the task force commanders. This is an extremely important item in command, for a portion of a raiding force's strength lies in the element of surprise and in relative position. Should it be necessary to break radio silence to transmit instructions for the operation of land based aircraft, the element of surprise would probably be lost and an advantageous relative position might be jeopardized. Allied land based aircraft did provide considerable valuable information, but the communications at that time were far from good. This was because the major portion of the air searches and reconnaissance was being conducted by the Commander Southwest Pacific area who was an entirely separate command from CTF 17. Also, and of equal importance, shorebased aircraft must be trained to coordinate their operations, both strategically and tactically with fleet units, in order that the carrier based planes may be relieved of long range scouting and may be ready to attack, with full groups, any targets located. Such a condition did not obtain during the Coral Sea action because of the remoteness of Australian bases, because of limited number of planes of suitable type available and because of the fatigue of the crews. Therefore, although it was desired to use land based aircraft for long range search, the carrier task groups were forced to augment the land based searches by use of carrier based planes.

The two Allied carrier task forces were TF 11 and TF 17. TF 11 (Rear Admiral Aubrey Fitch, USN) consisted of the carrier LEXINGTON, heavy cruisers MINNEAPOLIS, NEW ORLEANS, and destroyers PHELPS, AYLWIN, MONAGHAN, WORDEN, DEWEY, FARRAGUT, and TF 17 (Rear Admiral Frank Jack Fletcher, USN) consisted of the carrier YORKTOWN, heavy cruisers ASTORIA, PORTLAND, CHESTER and destroyers MORRIS, ANDERSON, HAMMANN, RUSSELL, SIMS and WALKE. These were two single carrier task forces which employed high mobility and heavy striking power and were ideally composed for raiding operations of the type which had been in vogue up to the Coral Sea Action. Both the LEXINGTON and the YORKTOWN were equipped with search radars and homing devices. However, mindful of the prevention objective, and further mindful of the increased Japanese carrier forces in the TRUK area, or moving southwards, CINCPAC had ordered these two carriers to form a single combined force of two carriers upon arrival at POINT BUTTERCUP.* It is apparent that this new striking force should have greatly increased striking power when the merger of both carrier groups had been completed. This merger actually did not become effective until May 6, when the earlier phases of the action had been completed. The combined carrier force was to be under the command of CTF 17.

The task assigned these forces was:

1. To destroy enemy ships, shipping and aircraft at favorable opportunities.

CTF 17 evidently considered that TF 17 which was composed, in part, of

*CINCPAC Secret dispatch 220345 of April 1942.

the SARATOGA and YORKTOWN, was on the basis of the means available and means opposed, at least the equal of the Japanese task force composed of the SHOKAKU and ZUIKAKU. Had the HORNET and ENTERPRISE, which were en route, arrived prior to the action, the Allied preponderance in carrier, air and surface power would have been overwhelming. However, the Allies were short of carriers in the Pacific and the loss of one carrier or the heavy damaging of one or both, could have a very retarding effect on Allied operations in the Southwest Pacific. Therefore it was important that maximum carrier strength be available at all times and that the carriers be not hazarded without due regard to calculated risk.

TF 11 visually contacted TF 17 in Latitude 16°-16' S., Longitude 162°-20' E., on May 1st. The oiler NEOSHO was with Task Force 17 at this time. TF 11 had been en route from PEARL HARBOR to CHRISTMAS Island when it had, on 19 April, received a dispatch from CINCPAC diverting it to the CORAL SEA Area and directing that it report to CTF 17 for duty. Apparently, CINCPAC hoped by this concentration of forces to surprise the Japanese in their planned operations to the south and to obtain local superiority at the decisive time and place. Thus we see that the combined TF 17 was organized to obtain, as a minimum, an equality in fighting strength.

It is of great interest to note that the Japanese two-carrier task force was apparently designed to counter the American single carrier task force at the same time that the two American single carrier task forces were being combined to one two-carrier task force to counter the Japanese carriers. This brings forth the fact that in war, even the best laid plans are subject to unexpected changes and these changes are to be regarded as normal.

After TF 11 had joined TF 17, CTF 17 directed CTF 11 to join a refueling group consisting of the CHICAGO, PERKINS and TIPPECANOE at Latitude 16°-00'S., Longitude 161°-45'E. and to fuel all ships to maximum out of the TIPPECANOE which had been directed by CINCPAC to return to EFATE. TF 11's fueling operations commenced at about 0800 on May 1st.

TF 17, meanwhile, had been fueling from another oiler, the NEOSHO, and topped off on the 2nd of May. CTF 17 made it a practice to fuel all destroyers from whatever supply was available whenever they could receive as much as 500 barrels of fuel.* He used oilers, carriers, and cruisers as the fueling source. This was an unavoidable condition. There was a shortage of oilers in the Pacific and the task forces had to fuel when they could. CTF 17 was seriously restricted by his logistics and felt that his freedom of action was limited. He was always concerned lest the Japanese discover his logistics weakness and attack his supply ships, and especially his oilers, in preference to his combatant ships.** Had the Japanese done this successfully, the ability of TF 17

*Action Report CTF 17 Battle of Coral Sea, May 27, 1942.

**Statement by CTF 17 to Commodore R.W. Bates, U.S.N. September 1946.

of TF 17 to operate in the CORAL SEA might have been markedly curtailed.

This practice of fueling destroyers from the large ships grew up largely because the cruising radius of the destroyers was not equal to that of the larger ships, and the necessity for shifting the destroyer screens during flight operations, caused a marked increase in the fuel consumption of the destroyers. In addition, the practice developed because it was much quicker to fuel destroyers from the larger ships than it was from the limited number of oilers which might be available. CTF 17 always endeavored to keep an oiler with his force during his stay in the Coral Sea excepting when actually on a strike.

While these refuelings from the larger ships increased the freedom of action of the task group at the time and were, therefore, of vital importance, they had the overall effect of forcing the retirement of entire task groups for major refuelings as happened throughout the war. On the other hand, it was of paramount importance for each command to be ready for any eventuality and it was this thought which guided CTF 17 in his fueling decisions.

There was a definite shortage of oilers available to CTF 17. He had the NEOSHO and the soon to be detached TIPPECANOE. For this reason, and with the prospect of immediate action facing him, he gave fueling from oilers priority.

TF 11 plus the CHICAGO and PERKINS, commenced fueling from the TIPPECANOE early on 2 May and the former two ships were detached at 1630 to join TF 17. Fueling of TF 11 was completed at 1310, 3 May at which time TIPPECANOE escorted by WORDEN was detached with orders to proceed to EFATE. This early completion of fueling was apparently a surprise, as CTF 11 had reported to CTF 17 that he would not be completed until noon on the 4th. How such a poor estimate of fueling could have been made is not known, but it might have had an adverse effect on Allied actions.

CTF 17 who had received information on the 2nd through intercepts of ComSowespac dispatches that the enemy was making final preparations for the advance on PORT MORESBY, decided that his command was too far to the south-eastward. He therefore directed CTF 11 to fuel his destroyers on a north-westerly course at night and rejoin TF 17 at daylight, May 4 in latitude 150-00' S, longitude 1670-00' E. This was the same rendezvous that had been previously arranged with Task Force 44, the Anzac Squadron, consisting of H.M.A.S. AUSTRALIA and H.M.A.S. HOBART. This decision of CTF 17 to fuel TF 11 destroyers on a northwesterly course, at night, appears to have been a sound one. The wind was from the SE and had TF 11 fueled into the wind as was customary and had it taken as long as forecast, TF 11 would have been far removed from the appointed rendezvous on the morning of 4 May.

On the afternoon of 2 May a YORKTOWN air scout sighted a submarine on the surface at 1515 bearing 0100 (T) distance about 30 miles from TF 17 and

about 15 miles bearing 018° from TF 11. Three SBD's, launched by the YORKTOWN to destroy this submarine, attacked it at 1545 with 6 depth charges. It dove and was not seen again, although CTF 17 detached 2 destroyers to investigate the contact. CTF 17 decided that his location had been reported.

This decision was what might have been termed an evaluated guess. However, the fact that a submarine was bombed within 15 miles of a task force by four carrier planes, does not necessarily mean that the task force has been located. It does indicate, on the other hand, that a carrier task group of unknown composition is within about 75 miles. In this case, the submarine which Japanese reports state was undamaged appears to have made no report whatsoever of the contact.

After separating from TF 11, TF 17 continued westward throughout the night and again fueled destroyers from the NEOSHO on the 3rd. Thus, at the time of the occupation of TULAGI by the Japanese about 0820 on May 3rd:

- (a) TF 17 was in latitude 16°-45' S., longitude 159°-24' E. and on a northwesterly course.
- (b) TF 11 was in latitude 16°-26' S., longitude 161°-50' E. and on a westerly course.

The movements of both TF 17 and TF 11 between May 1st and May 3rd are of interest from a security standpoint. Here, for about 50 hours, two task forces maneuvered at slow speed while fueling, and crossed and recrossed one another's tracks. Most of these maneuvers occurred within a small area about 45 miles in an east-west direction and about 60 miles in a north-south direction. They are plainly shown in Diagram "C". The great danger, of course, lay in the possibility of action by enemy submarines, six of which were in the CORAL SEA area. As has been previously shown, aircraft from the YORKTOWN sighted and attacked a submarine between 1515 and 1545, May 2nd, within about 30 miles bearing 018°(T) from the YORKTOWN's 1515 position and within 15 miles of TF 11. The submarine was not seen again.

CTF 17 apparently decided that the submarine danger was not so great as to endanger his command for he continued fueling and did not change his fueling area. Some months later, after the NORTH CAROLINA, SARATOGA, and WASP had been torpedoed under circumstances similar to the above, CINCPAC directed that carrier task forces should not remain in submarine areas for long periods, but should change their operating areas frequently and radically from day to day.*

CTF 17, during this fueling, does not appear to have considered it necessary to keep his task forces concentrated. He apparently did not feel the need for visual communications or for the additional security that two task groups closely concentrated might have given him. Why he felt this way is not clear, for he had been informed by CINCPAC that both TF 11 and TF 17 were, upon arrival

*CINCPAC Serial 05168 of October 31, 1942.

at POINT BUTTERCUP, to be combined into a single task force under his command--he had received information that the Japanese would probably start their PORT MORESBY or lower SOLOMONS operation, or both, by April 28th--he had been informed of the presence of the Japanese carrier division, Cardiv 5, at TRUK or en route south, and he must have realized that it was an enemy capability of number one priority to cover his amphibious units for the above landings with air and surface power. His desire to be ready for immediate service--his desire for freedom of action should an emergency arise--his anxiety over the developing situation--his desire to be more to the westward and northward, are all appreciated, but could not these desires have been obtained with a combined force? Does it not appear, therefore, as if it would have been wiser to have combined the two task forces as directed by CINCPAC or, at the least, have kept them together so that he would be enabled in minimum time to communicate visually and to concentrate the maximum strength available should the need arise? Also there could have been an interchange of oilers which might have expedited the fueling. Had this been done, the fact that TF 11 had completed fueling a day earlier than planned, would have been known to him and he would have been able to strike TULAGI with two full task forces. As it happened, these two task forces were roughly in the same latitude and but 60 miles apart at 2000 on 3 May, and, yet, the fact that TF 11 had completed fueling, and was available for the strike, was apparently unknown to CTF 17. This was because the forces were not within visual signal distance; it was not desired to break radio silence, and aeroplane drop was not used.

Allied Plan

The basis of the Allied plan was a pure raiding operation. CTF 17 was to keep his command ready in all respects for immediate action. When he received a report concerning Japanese movements either from CINCPAC or from Commander, Southwest Pacific Forces or from his own command, which indicated that a fruitful target, action against which would contribute toward the basic plan, had appeared, CTF 17 was to take such offensive action against it as appeared advisable.

This plan was sound, but it will appear later that CTF 17, in carrying it out, seemed in his planning, to underestimate the Japanese strength, and, apparently, failed to discern the Japanese plan of encirclement from the east which nearly resulted in disaster.

General Summary

The preceding discussion completes the background for the action of the CORAL SEA. In general, it indicates on the Japanese side, four surface forces, one of which was a strong two-carrier group, supported by somewhat inadequate land and tender based aircraft and submarines, proceeding to occupy PORT MORESBY and, on the Allied side, two single-carrier forces, soon to be merged into one two-carrier force, supported by extremely sketchy land and tender based

aircraft and submarines waiting to take offensive action against these Japanese forces, when their location and composition had been reported. TULAGI had just been occupied.

All Japanese forces consisted entirely of Naval forces, with the exception of the South Seas Detached Force, which was Army, and all were under command of the naval commander. Allied Forces, on the other hand, consisted of both Army and Naval forces. These were generally under separate commanders, not in any way in the same chain of command.

ACTION AT TULAGI
From 0820 May 3rd to 2400 May 4

After TULAGI had been occupied the Japanese Covering Force at 1100 May 3rd, left its covering position south of NEW GEORGIA Island and headed in a northwesterly direction, at an economical speed, towards QUEEN CAROLINE HARBOR, BUKA ISLAND, where it was to fuel prior to joining the PORT MORESBY Invasion Force. The Striking Force, which was en route on a southeasterly course to its planned position, was 210 miles northeast of NEW IRELAND and about 680 miles northwest of TULAGI. It was transferring certain planes to RABAU which planes had been ferried from TRUK. The Support Force was returning to join the PORT MORESBY Invasion Force which was still at anchor in RABAU.

All of these moves were in accordance with the Japanese plan which called for the PORT MORESBY Invasion Force to depart from RABAU at 1800 on May 4.* Everything had proceeded according to plan and there seems to have been no thought in the minds of the Japanese of possible action by Allied forces against TULAGI now that it had been occupied by the Japanese without opposition from Allied Forces. Thus we find that, in the TULAGI operation, the Japanese apparently failed to analyze the succession of events intelligently. Had they studied their operation thoroughly, from the viewpoint of the Allied commander, they might have realized that there was a strong Allied capability of striking TULAGI in order to deny temporarily the use of that base for reconnaissance against the Allied raiding force.

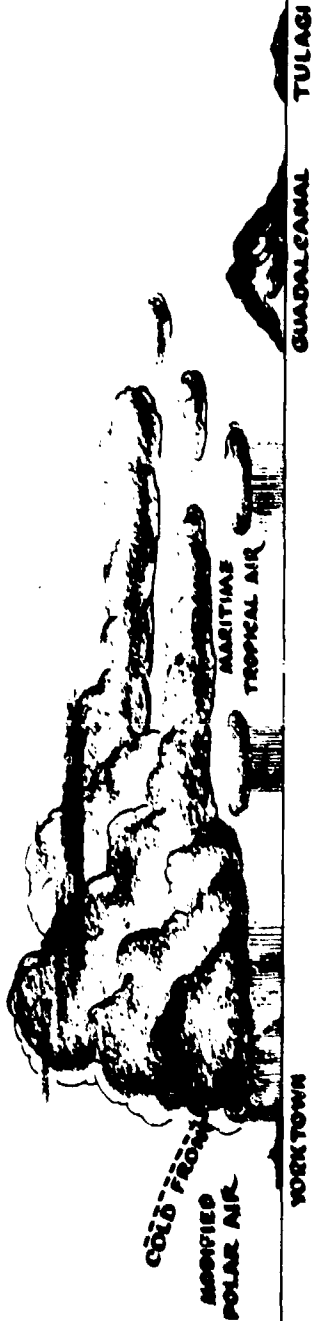
At the time of the occupation of TULAGI, TF 17 and TF 11 were on generally westerly and northwesterly courses and were continuing fueling. Both completed fueling on the 3rd, although this fact was apparently not known to CTF 17.

At 1900 3 May, CTF 17 received a report from Commander, Southwest Pacific Forces which indicated that the Japanese had begun to occupy TULAGI Harbor in the SOLOMONS. He stated in his action report, "This is just the kind of report we had been waiting two months to receive.", and he also stated

*Combat Report No. 7, CruDiv 6, Force of the Coral Sea, WDC 160997, dated 17 July 1942, P.4.

Det 472

CROSS SECTION OF THE ATMOSPHERE, 1100 (-11) 4 MAY 1942



THE YORKTOWN LAUNCHED ITS ATTACK ON TULAGI FROM AN AREA OF BAD WEATHER NEAR A WEAK COLD FRONT. THE BAD WEATHER AREA ASSOCIATED WITH THIS FRONT COVERED MOST OF THE ROUTE TO TULAGI, PRODUCING UNDESIRABLE CONDITIONS, BUT AT THE SAME TIME FURNISHING EXCELLENT COVER FOR THE CARRIER AND THE ATTACKING PLANES.

AWO-1A-47

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PLATE I

later that he had thought these were "juicy targets". He decided to attack these targets without waiting to be joined by TF 11 which had completed its fueling, but which had not reported to him because of radio silence and because it was out of visual signal range. What motivated CTF 17 in making the decision to attack, with reduced forces, is not known, but it appears to have been his belief that he was in adequate strength, and it appears to have been his further belief that he had been reported by a submarine and, therefore, his freedom of action would be jeopardized unless he struck immediately. He was successful in his attack, but it will be shown later that he very nearly fell into a trap because of his relatively weak force. He succeeded because the Japanese failed to recognize and exploit the favorable military situation they were creating for themselves.

He immediately detached the NEOSHO, with the RUSSELL as escort, and directed the NEOSHO to notify CTF 11 and CTF 44 as the rendezvous for May 4 that he was proceeding to attack. He likewise directed the NEOSHO to inform all ships that a new rendezvous would be made at latitude 15°-00' S., longitude 160°-00' E. at daylight on May 5th.

TF 17 now consisted of the carrier YORKTOWN (flag), heavy cruisers, ASTORIA, CHESTER and PORTLAND and the destroyers HAMMANN, ANDERSON, PERKINS, WALKER, MORRIS and SIMS.

This decision for TF 11 plus TF 44, to continue on to a new rendezvous on the 5th is open to argument. It still did not consider the enemy's capability of appearing in the TULAGI area with a strong carrier task force. Therefore, does it not appear correct that CTF 17 should have directed the NEOSHO to direct CTF 11 plus TF 44 to proceed immediately, upon completion of fueling, to some designated rendezvous in the direction of TULAGI, in order to obtain a more favorable supporting position should such support be necessary?

TF 17 continued on a northerly course throughout the night and by 0700 on May 4th it had reached a point about 100 miles southwest of GUADALCANAL Island, at latitude 11°-10' S., longitude 158°-49' E. At this time, TF 11, TF 44, NEOSHO and RUSSELL were in the vicinity of the May 4th rendezvous and were thus about 250 miles south of TF 17, and unable to support TF 17 should a sudden need arise.

As TF 17 approached its planned launching position it ran into weather conditions which were unfavorable for flying. A moderate cold front had left the Australian coast and moved northwards. The trade wind conditions normal to the area became reestablished in the CORAL SEA to the south of this front. Visibility south of the front was

excellent, with moderate southeast winds of great constancy. However, in the front near the SOLOMONS the weather was bad. The cold front had reached its northernmost position just south of GUADALCANAL Island. Bad weather now covered a wide area south of GUADALCANAL for a distance of over 100 miles. The sky was overcast with stratocumulus, cumulus and cumulonimbus clouds. The visibility was adversely affected by showers and squalls. The wind was southeast 25 knots with occasional gusts of 35 knots.*

Bad weather existed over the entire flying route from the carrier task force launching position to within 20 miles of TULAGI. It provided excellent concealment for Allied aircraft, and made the attack a complete surprise to the Japanese. TULAGI itself, was in clear weather. Thus bad weather around the carrier task force and good weather over TULAGI obtained throughout the day. Tactically speaking, such a combination of cloud cover sufficiently low and dense to prevent effective scouting by the Japanese planes, none of which had radar, but not so low as to interfere with the homing of Allied planes, was ideal. TF 17 profited fully by it, once advantages had become apparent.

The launching position for the first strike appears to have been correctly chosen as it was necessary during the day, with a southeast wind, to work up to the north and then back to the south in order to maintain about 100 miles between the task force and TULAGI. It was very important that the task force in the afternoon should be on a southeasterly course, as this was the direction of the wind and facilitated retirement. Should the enemy be caught by surprise, it would normally require some hours before support in sufficient strength could be supplied to affect operations and, by that time, the attack would generally be over and the attacking force would be withdrawing. Should the enemy not be caught by surprise but, should he, instead, offer strong counteraction, the southeast wind would be extremely helpful to the Allies. It would also be equally helpful to the Japanese, should their support be carrier based planes. The RENNEL Islands might offer some interference to the Allied carrier task force in case of forced early withdrawal but, with the bad weather conditions existing around TF 17, the possibility of early discovery by enemy search planes appeared remote.

By 0701, the cruisers had launched an inner air patrol against submarines, and the YORKTOWN had commenced launching an attack group of 12 torpedo planes (TBD), 13 scout planes (SBD) and 15 bombers (SB), followed by a combat air patrol of six fighters (F4F-3). A combat air patrol of six planes working in three shifts was maintained throughout the day.

The composition of this attack group was unusual in that no fighters either preceded it or accompanied it. This appears to have been because the YORKTOWN carried but 18 fighters, all of which were thought necessary for combat air patrol, and because it was hoped to catch the Japanese by surprise, in which case, no need for fighters was apparently

*Aerology and Naval Warfare, the Battle of the Coral Sea, Aerology Section, Chief of Naval Operations, April 1944. (NAVAER 50-17-12).

anticipated. The guns of the attack planes were therefore the sole protection against any enemy aircraft which might be encountered. However, it was found necessary later to employ fighters against enemy float planes which had become a nuisance to the attack groups.

The Attack Group rendezvoused by squadrons and each squadron proceeded to TULAGI independently. Upon arrival at TULAGI each squadron conducted its attacks in the manner of those early days with little or no coordination with the attacks by other squadrons. This naturally resulted in some confusion, and caused a greater expenditure of effort that would have been necessary had the attacks been coordinated.

An important reason for this apparent lack of coordination appears to have been the fact that the Air Group Commander did not accompany the Attack Group, as his services were required on the carrier as fighter director officer, and no other strike group command was appointed.* Why no Strike Group Commander was appointed is not apparent. Air operations had long shown the necessity for some overall commander in the attack area to reconnoiter the target area during the initial attack, to coordinate the Squadrons in the assignment of targets and order of attack, to maintain radio discipline, and to observe and report the results of the attacks.

The following enemy vessels were reported by the planes participating in the first attack: 2 large AK's or AP's (8-10,000 tons), 1 AK (5,000 tons) 4 gunboats (1,000-1500 tons), 1 CL (JINTSU Class), 2 DD's, 1 large AV, 5 seaplanes anchored off MAKAMBO Island and numerous small patrol boats and launches. This report, as was true in many other instances during the war in the PACIFIC, was considerably in error in recognition of types, although the actual number of vessels reported was reasonably accurate.

A study of the Japanese action reports for the TULAGI and PORT MORESBY operations, indicates that the following ships were present at TULAGI at the time of the attack:

OKINOSHIMA	1 CM
KIKUZUKI, YUZUKI	2 DD
TAMA-MARU, HAGIWA-MARU, NOSHIRA-MARU	3 XAV
Coastal Mine Sweepers No. 1 and No. 2	2 AMc
TAMA-MARU No. 8, KAGA-MARU No. 3	4 XPC
AZUMAYAMA-MARU, TAKAHAE-MARU	

*Action Report, U.S.S. YORKTOWN, Serial 054, May 11, 1942, Executive Officer's report attached thereto dated 19 May 1942, p.3.

The First Attack Group consisting of 15 VB of Bombing Squadron Five, 13 VS of Scouting Squadron Five and 12 VT of Torpedo Squadron Five was launched for its initial attack commencing at 0651. The combat air patrol does not appear to have been launched until 0700. Sunrise was at 0642 and morning twilight long preceded this.

The First Attack Group landed at 0951 and was rearmed immediately.

The Second Attack Group consisting of 14 VB of Bombing Squadron Five, 13 VS of Scouting Five and 11 VT of Torpedo Squadron Five were launched between 1058 and 1120. Each squadron proceeded independently to the Target Area, with the VS and VB aircraft scouting the area to West and Northwest and reporting the position of ships to the VT Squadron. This plan of scouting to the West and Northwest and reporting the position of ships to the VT squadron, was sound, but here again, the attacks were not coordinated but were initiated by individual squadron commanders.

The second Attack Group landed at 1519 and was rearmed immediately.

The third Attack Group consisting of 12 VS of Scouting Squadron Five and 9 VB's of Bombing Squadron Five was launched at 1400. At 1652 the third Attack Group landed, and air operations against TULAGI were completed.

Certain errors of commission were noted during these attacks. Among these were:

(a) Torpedoes were dropped at ranges varying from 500 to 1000 yards in the first attack, to upwards of 3000 yards in the later attacks. This long range dropping of torpedoes appears to have been caused by a desire on the part of the pilots of the torpedo planes to avoid Japanese anti-aircraft fire which was reported as heavy, but which was, in fact, somewhat light. This was the first experience for some of the pilots against AA fire and it appeared worse than it was. Torpedoes were dropped much closer later during the Coral Sea action.

(b) Thirteen 1000 pound bombs and eleven torpedoes were expended by the second Attack Group on the OKINOSHIMA. This shows that a low percentage of hits must have been made to have only achieved what the Japanese describe as "No difficulty in battle cruising, some casualties."

(c) Thirteen 1000 pound general purpose bombs were expended by Bombing Squadron Five on three gunboats. The present recommended primary arming plan for this type of target calls for nothing greater than a five inch rocket. Nothing should restrain the plane commander concerned from dropping whatever bomb he may be loaded with, provided he considers the target worthy of the effort, but in this case, targets were still afloat in the area which were better suited for the 1000 pound general purpose

bomb. With proper reconnaissance of the target area by a Strike Group Commander, these targets would have been apparent, and could then have been assigned to the squadrons concerned in such a manner as to best insure their destruction.

The arming plan for the various squadrons was the same throughout the day. The planes of Scouting Squadron Five and Bombing Squadron Five were each armed with one 1000 pound MK 13 general purpose bomb with MK 21 nose fuses and MK 23 tail fuses. These fuses were each impact fuses with .01 second delay action, and appear to have been the only ones available for the bombs employed. The Commanding Officer of the YORKTOWN, in his report of this action, stated* that the results obtained from direct hits on large vessels were disappointing and recommended that a slower fuse of .25 seconds be provided. This would have allowed the bombs to explode well inside the type of ships encountered at TULAGI instead of more nearly on contact as was apparently the case in this action. As a result of the use of the .01 second fuses the damage inflicted by direct hits on the larger ships appears to have been mostly topside damage and the mining effect from near misses appears to have been negligible. Torpedo Squadron Five had each plane armed with one MK XIII torpedo with a depth setting of 10 feet. All fighters were armed with .50 caliber machine guns only.

Four VF's were launched at 1310 to proceed to TULAGI to destroy seaplanes which were attacking the bombers and torpedo planes. These planes sighted and shot down three enemy single float seaplanes in the vicinity of TULAGI. They then strafed a destroyer which was proceeding in company with the AV to northwestward. This destroyer was described by the fighter pilots involved, to have been a new two-stack destroyer of the ASASIO class. No destroyer of this class was present at TULAGI and it is, therefore, assumed that she was the YUZUKI which the Japanese state was damaged on May 4th at TULAGI by carrier planes. She was not damaged sufficiently, however, to affect seriously her battle efficiency, although her Captain and many others were dead or wounded.

During the return of these 4 VF's to the YORKTOWN, one section became separated and landed on the South coast of GUADALCANAL Island near CAPE HENSLOW. Both pilots were rescued that night by the USS HAMMANN.

The evaluation on Page 38 compares the damage inflicted, as evaluated from Japanese sources now available, with that of the Allies, based on an evaluation of Allied pilots' reports made by the Commanding Officer of the YORKTOWN at the time of the action.

*Action Report, USS YORKTOWN, Serial 054, May 11, 1942, p. 14.

SUMMARY OF DAMAGE

C.O. YORKTOWN EVALUATION

PRESENT EVALUATION

Ships Sunk

2 DD's by bombs and
torpedoes
1 AK, by torpedoes

2 AMc Special duty mine sweepers
No. 1 and No. 2, by bombs
or torpedoes.
1 XAM TAMA MARU by bombs or tor-
pedoes.

Ships Beached

1 CL (JINTSU Class) by
torpedoes and bombs

1 DD KIKUZUKI by bomb or tor-
pedoes (beached and later
sunk)

Ships Severely Damaged

1 DD (ASASIO class) by
bombs & torpedoes
1 AV by bombs

(see YUZUKI DD)

(see OKINOSHIMA CM-6)

Ships Damaged

1 AK (large) by bombs

1 CM OKINOSHIMA by bombs
1 DD YUZUKI by strafing
1 KPC TAMA MARU No. 8 by bombs

Miscellaneous

5 single float seaplanes
destroyed
Various small craft sunk or
damaged by strafing.

5 single float seaplanes
destroyed. Various small
craft sunk or damaged by
strafing.

Own Losses Reported & Present Evaluation

2 VF - Pilots recovered
1 VT - Crew not recovered

3 VS - Damaged
3 VB - Damaged
2 VT - Damaged

The following table "Summary of the TULAGI Attack" is a complete analysis of this attack which indicates the targets, number of planes attacking, type of AA fire encountered, and other similar matters of analytical interest.

The TULAGI operation was certainly disappointing in terms of the ratio of ammunition expended to results obtained. This expenditure included 22 torpedoes, seventy-six 1000 pound general purpose bombs, 12,570 rounds of .50 caliber and 70,095 rounds of .30 caliber machine gun ammunition.

SUMMARY OF TULAGI ATTACK

NOTES: (a) All bombs were dropped in dive bombing attacks from a release altitude of 2500 feet except first attack by 7B-5 which experienced fogging of telescope sights due to high push over and therefore released at higher altitudes.

(b) All bombs were MK 49 general purpose bombs with MK 21 zone fuses and MK 23 ball fuses.

(c) Torpedoes set with 10 foot depth setting.

(d) Like minerals in paragraph 1 in the Squadron Target Indicator column indicates same target.

NOTES: (a) All bombs were dropped in dive bombing attacks from a release altitude of 2500 feet except three which experienced fogging of telescope sights due to high push over and therefore released at a lower altitude. (b) All bombs were MK XIII general purpose bombs with MK 12 nose fuses and MK 23 tail fuses. (c) Torpedoes set with 10 foot depth setting. (d) Line numerals in parenthesis in the Squads Target Identification column indicate same target.

CINCPAC observed that the performance of the YORKTOWN Air Group, despite their "very creditable willingness and effort to keep after their enemy objective until it was destroyed" emphasized "how much proficiency drops off in wartime and the necessity for target practice at every opportunity in order to keep pilots trained in all phases of aerial warfare."*

While TF 17 was preparing for and making the above attacks at TULAGI, TF 11, in accordance with instructions, was approaching his designated rendezvous for May 4th. At 0642, CTF 11 launched an air search of about 6 planes which searched the NW sector to a radius of 200 miles. This search appears to have been made because CTF 11 did not feel that the Allied Air searches from AUSTRALIA were adequate for his safety. He knew of the Port Moresby operation and, also, of the enemy air stationed at RABAU and LAE, and he did not wish to be caught by surprise. He evidently felt that his other dangerous area was being protected by CTF 17.

At 0800, May 4th, at the rendezvous set for May 4th, TF 11 rendezvoused with the NEOSHO and the RUSSELL, and at 0900 with TF 44. Then, with all three groups, CTF 11 headed on a southeasterly course which took him about 160 miles southeast of that rendezvous. He held this course until 2000, May 4th, when he changed to a northeasterly course and headed for the 0800 rendezvous for May 5th. CTF 11 states that he chose to steer in a southeasterly direction until 2000 rather than in a northeasterly direction, even though such a course would probably place him in a poor supporting position because, owing to radio silence, he did not know what fortune CTF 17 was having in his attack on TULAGI and he thought it well to be in a more southerly area.** It would appear as if this reasoning of CTF 11, which apparently coincided with the views of CTF 17, did not consider the enemy capability of opposing CTF 17 in strength, and the desirability, therefore, of being in an adequate supporting position. Had CTF 11 headed in a northeasterly direction he would have been, at 2000, about 250 miles nearer TF 17 and would have at the same time been beyond the normal range of enemy search planes from RABAU.

REACTIONS OF JAPANESE TASK FORCES

Meanwhile, the Japanese command was quite busy. Although caught by surprise by the attacks of TF 17, the forces at TULAGI apparently managed to send dispatches concerning their plight with the result that the various Japanese commands began taking measures in accordance with their responsibilities.

The Striking Force which was transferring planes to RABAU from a position distant about 440 miles bearing 310° from TULAGI does not appear to have received information concerning the attack very promptly. It completed transferring the planes and then fueled. It appears that some time about

*CINCPAC Serial 01704, June 17, 1942, First Endorsement on CTF 17 Action Report, Serial 0782 of May 27, 1942. p.3

**Statement by CTF 11 to Commodore R.W. Bates, U.S. Navy, Head of Department of Analysis, U.S. Naval War College.

CONFIDENTIAL

noon, word of the attack was received by the Commander, Striking Force. The action taken by the Commander, Striking Force in this situation is somewhat confused. Certain of the reports say that he proceeded to TULAGI but this is believed to be incorrect. It is possible that he launched planes to the TULAGI area for the support of that place, but as the range approached the maximum combat radius of his planes, such action seems improbable. His surface force appears to have continued on a southeasterly course and, by 2400 of the 4th, had reached a position 90 miles north of the south tip of SANTA ISABEL Island. It appears that speed had been increased to 25 knots about 1200, May 4.

This decision of Commander, Striking Force to continue on a southeasterly course and outside the SOLOMON Islands is considered to have been correct. He was the left wing of the Cannae envelopment and it would not have been wise for him to dash through the islands on a direct course for TULAGI, as the enemy carrier force might retire to the eastward and out the Coral Sea. His objective, while the Port Moresby Invasion Force was still at anchor in RABAU or in that vicinity, was the containment of the Allied carrier force in the Coral Sea and its destruction when he could do this advantageously and with surprise. Such an objective might be accomplished by a sweep from the northeast and around the southern end of SAN CRISTOBAL Island--it might not be accomplished by a strike through the SOLOMONS.

The Covering Force* was still headed for QUEEN CAROLINE Harbor for fueling, when it was informed of the attack at TULAGI. This information got through very promptly, for at 0915, May 4th, the Covering Force was reorganized into two task groups. One group, the second section of CruDiv 6, composed of the heavy cruisers KINUGASA and FURUTAKA, continued on to consolidate with the PORT MORESBY Invasion Force. The other group, the first section of CruDiv 6, composed of the AOBA and the KAKO, plus the small carrier SHOHO and the destroyer SAZANAMI, reversed course and headed southward for TULAGI. It would be of interest to know why Commander Covering Force divided his command into two such relatively weak groups. Neither group was effective. The first group had no air cover except what could be provided by land and float planes; the group was especially weak when compared with an Allied carrier task force. This latter group steamed south at high speed and endeavored to track the Allied task force which had attacked TULAGI and which was believed to be about 370 miles south of that place, but had no success. It reached its former patrol area, some 20 to 30 miles off the south coast of the NEW GEORGIA Islands, arriving there about 2400, May 4th.

The Support Force, which was returning from the NEW GEORGIA Area, was, apparently, headed for rendezvous 40 miles northwest of VELLA LAVELLA when it received word of the attack on TULAGI. It did not take any action against the Allied carrier forces which had attacked TULAGI that day and continued on towards its rendezvous. At 2400, May 4th, it was about 160 miles southwest of SHORTLAND Island.

*Combat Report No. 7, CruDiv 6, dated 17 July 1942, WDC #180997, P.3.

west of SHORTLAND Island.

The TULAGI Invasion Force was dissolved at about 1200 May 4th and its units, not required at TULAGI, were directed to join other units generally connected with the PORT MORESBY Operation.

RETIREMENT OF TF 17, May 4th

After the action had been completed at 1632, May 4th, TF 17 plus the CHICAGO less the HAMMANN and the PERKINS continued to the south in retirement and headed for the May 5 rendezvous. The HAMMANN and the PERKINS had been left behind on "Search and Rescue" operations. The PERKINS searched unsuccessfully during the night for the crew of a lost torpedo plane and the HAMMANN recovered pilots from the two fighters which had landed on GUAD-ALCANAL Island.* Thus was initiated by CTF 17, after the Battle of the Coral Sea, what appear to have been two of the first, if not the first, instances of Air Sea Rescue in the Western Pacific of aviators downed in combat with the Japanese. That such rescues were of unquestioned importance became more and more evident as the Pacific War progressed. Not only did they improve the morale of airmen, and thus their fighting qualities, but, also, they saved for the Country trained airmen scarcely replaceable. The Japanese, on the other hand, did not make much effort to save pilots. They underestimated the value of their original pilots, most of whom had enjoyed long peacetime and combat training, and they did not feel that these pilots were particularly important to success. They sacrificed protective features in aeroplane design in order to obtain better performance, and failed to establish Air-Sea Rescue on a very effective scale. Thus their original pilots were gradually expended. However, at the time of the Coral Sea action, Japanese pilots, in a large part, were still original pilots and their combat quality was high.

The morale of TF 17 was now at a higher pitch than ever and the task force was convinced that it had destroyed a large part of the Japanese Navy. At about evening twilight, on May 4th, CTF 17 requested Commander Cruisers to nominate two cruisers to go into SAVO Island to clean up the cripples on the following dawn. Commander Cruisers nominated the CHESTER and the ASTORIA. For some reason, not as yet explained, the attack was called off. This was a wise decision, as the two cruisers would have been caught by the Japanese Striking Force, by the Japanese Covering Force and by Japanese land based air power.** This incident is introduced here merely to indicate the extreme confidence which permeated the Allied Command and to show how necessary it is for the commander to supervise the developing action with great care. Fortunately, CTF 17 in apparently reestimating the situation, arrived at the con-

*Action Report, CTF 17, Serial 0782 dated May 27, 1942, Para. 12, p.4.

**Interrogation of Captain T.M. Shock, U.S.N., former Commanding Officer, USS CHESTER, Naval War College, 1 October 1948.

clusion that such an attack was unwise.

EVENTS BETWEEN TULAGI AND MISIMA
From 2400 May 4 to 2400 May 6

The weather conditions on May 5th and 6th were bad in certain areas of the CORAL SEA. The cold front to the south of GUADALCANAL had reached its most northerly position by May 4th and by May 5th had begun to move slowly southward, taking on the characteristics of a warm front. As the semi-permanent high pressure area south of NEW CALEDONIA moved towards the southeast, the frontal area had come more and more under the influence of the wind circulation to the north.

On May 5th, the front extended from a position across RENNELL Island in a direction west-northwest towards MISIMA and east-southeast towards the NEW HEBRIDES. The task force in the vicinity of 15° S. and 160° E. encountered typical trade wind weather with partly cloudy skies; the base of the cumulus clouds at 2000 feet and tops at 7000 feet. Winds were southeasterly, 15 knots, and were quite steady, both in direction and velocity.

The next day, May 6th, part of the front had moved to a position about 150 miles south of RENNELL Island as a warm front; the remainder had continued moving northward across NEW GUINEA and the NEW HEBRIDES.*

At 0816 on the morning of May 5, TF 17 which had retired throughout the night without incident, rendezvoused with TF 11 and TF 44 at Latitude 15°-00' S., Longitude 160°-00' E. The HALMANN and FERRING had rejoined prior to this time. About one-half hour before this rendezvous had been effected, the YORKTOWN had shot down a Japanese 4-engine flying boat which had been discovered by radar. This flying boat was shot down nearer the LEXINGTON than the YORKTOWN and there seems to have been some question as to whether it was trailing TF 11 or TF 17. As a YORKTOWN air scout had reported an enemy submarine on the surface at 0738, which submarine was headed on a course the reverse of his bearing, it is probable that the flying boat had been directing the submarine towards one of the two task forces. An air search was unable to locate the submarine later. The shooting down of this flying boat in this area was an indication, as stated previously in the discussion of Japanese searches, of the area in which CTF 17 was now operating was apparently within the range of Japanese aircraft operating from both TULAGI and SHORTLAND Island. CTF 17 had every reason to assume that the composition of at least one of his carrier task forces was known to the Japanese. Actually, this flying boat either did not make any report or, if it did, the report was not received by the Japanese.**

TF 17 fueled from the NECCHO during the day of May 5th on a southeasterly course which course was held until 1930. TF 17 and TF 11 plus

*Aerology and Naval Warfare, The Battle of the Coral Sea, Aerology Section, Office of Chief of Naval Operations (NAVAER 50-17-12), April 1944.

**War Diary 25th Air Flotilla, Bismarck Area Base Air Force, 1 April - 11 May 1942, WDC 161725, p.6.

TF 44 generally steamed within visual signal distance of each other. This concentration appears to have been a vast improvement over the separation which had existed on the 3rd and 4th of May.

CTF 17 evidently made certain air searches on the 5th, as it was at 0738 on that date that one of the YORKTOWN planes discovered a submarine 150 miles away from the task forces, but what search was made and in what sectors, is not indicated in the action reports.

In view of the fact that the enemy appeared to be preparing to move towards PORT MORESBY, CTF 17, at about 2000, proceeded with all forces to the northwestward during the night.

The three task groups plus the NEOSHO continued on a northwesterly course throughout the night without incident. At 0700, May 6th, CTF 17 decided to place his operation order Number 2-42, which he had issued on May 1st, into effect.* This order organized TF 11, TF 17, and TF 44 into a combined task force to be called TF 17 with an Attack Group for the purpose of making day and night attacks on enemy surface craft; with a Support Group of cruisers and destroyers to protect the carriers; with an Air Group to destroy enemy forces reported from any source; and with a Fueling Group assigned to a definite rendezvous. There was a proviso in the order that the Attack Group and the Support Group functions might be interchanged as directed by CTF 17. Instructions were also given to the Search Group which consisted of the TANCER and 12 VP based at NOUMEA concerning the air searches to be made from NOUMEA.

CTF 17's order gave as its basic plan, in paragraph 2, "This force will destroy enemy ships, shipping, and aircraft at favorable opportunities in order to assist in checking further advances by the enemy in the NEW GUINEA-SOLOMON Area."

This Operation Order failed to provide a Battle Plan for use when the combined force was in contact with the enemy during night or low visibility or even for day action. This is considered to be an unwise omission as it is much simpler for forces to understand doctrine when that doctrine has been promulgated in advance. Such a plan should indicate the projected composition of forces, the approved battle ranges, the location of the carrier forces and matters of similar importance. It will be shown later that this failure to issue such a plan caused a separation of forces and a lack of proper coordination.

Immediately after the order became effective, TF 11, TF 17, and TF 44 were combined into one task force by CTF 17, which new task force retained the old task force title TF 17. This final decision to combine these two

*Action Report CTF 17, Serial 0782, dated May 27, 1942. para. 14, p.4.

task forces, each consisting of one carrier, into one two-carrier task force, appears sound. This was done by CTF 17 because he considered that the strategical situation was now such that to so combine them was logical.* Also, and this was an important consideration, he apparently planned to make CTF 11, the officer-in-tactical command during air operations, although such a change in OTC is not indicated in his operation order and CTF 11 was not informed of it until some hours before the action on May 8th.** No reports had been received, which indicated the grouping of these enemy carriers reported in the NEW GUINEA-NEW BRITAIN-SOLOMON Area but CTF 17 evidently estimated that they might be strongly grouped as evidenced by the previous reports of the SHOKAKU and ZUIKAKU.

CTF 17 specifically defined the areas to be searched daily by the Search Group and he further specified that the search would be made by six planes. The areas to be included, consisted of the main area bounded by bearings 305° and 360° from NOUMEA, the northwest boundary of the South Pacific Ocean area, and latitude 11°-30'S. and a smaller area defined by three definite geographical points that was apparently designed to afford a certain amount of anti-submarine security for the base being established at EFATE. A further provision in the order, directed Commander, Search Group "to modify these searches if later developments indicate a need therefore, and keep the Task Force Commander advised."***

This search plan was unusual, in that the radius of search in the main area was limited to the eastern boundary of the Southwest Pacific Area and did not adequately cover the area to the north and northwest of NEW CALEDONIA. As may be seen from Diagram E, the new search plan increased the unsearched distance between the southern tip of SAN CRISTOBAL Island and the northern limit of the search from 25 miles in the search previously in effect to 105 miles in the new search prescribed by CTF 17.

When CTF 17 made his estimate and issued his orders, TULAGI was in the hands of the Australians who were making searches from TULAGI to cover the SOLOMON Islands south to the Northwest boundary of the South Pacific Area. CTF 17's plan for the patrol planes was evidently coordinated with this search. When TULAGI was evacuated by the Australians on May 2, this area was no longer searched from TULAGI and was generally beyond the range of searches from AUSTRALIA or PORT MORESBY. It appears that ComSoWesPac or his Commander Naval Forces should have notified CTF 17 of his inability to search this area and then CTF 17 would have directed any necessary action by Commander Search Group. Whether CTF 17 was so notified, seems doubtful.

The searches from NOUMEA had, prior to May 5th, been conducted by six patrol planes (PRY-5) employing three at one time, but the new searches could not be conducted adequately by less than twelve patrol planes. The six additional patrol planes required had been ordered to report to Commander Search

*Letter from Captain J.B. Hefferman, USN, Historian of the Navy, dated 6 October 1946 to Commodore R.W. Bates USN, Head of Department of Analysis, Naval War College.

**Statement by CTF 11, Vice Admiral Aubrey Fitch, USN, to Commodore R.W. Bates, USN, Head of Department of Analysis, Naval War College, 30 November 1946.

***CTF 17 Order No. 2-4 [REDACTED] 1942, para. 3(c)(2) p.4.

Group at NOUMEA. These planes arrived on May 4th. On this same day, Commander Search Group received CTF 17's operation order.

On the morning of May 5th, Commander Search Group commenced the daily six-plane search prescribed in the operation order. He did not know when CTF 17 was going to make it effective, but he did know that it would be soon and that he would probably not be advised. He, therefore, decided to operate by doctrine and, therefore, placed the plan in effect. This decision appears to have been correct, for CTF 17 was maintaining radio silence; he was already operating in the CORAL SEA and he had sent no previous directives to Commander Search group as to the type or extent of searches desired in support of the operation.

CTF 17's search plan was inadequate to locate any enemy forces which rounded SAN CRISTOBAL Island within 80 miles of the shore, and therefore disregarded, to a degree, his objective of destroying enemy ships. It failed to locate the Striking Force which passed into the CORAL SEA about 1900, on May 5th, because, from NOUMEA, the radius of search of the search planes was too short to extend into the more vital areas. The three-plane parallel search previously in effect would also have failed to locate the Striking Force because the search planes, in this case, would have reached their northern limit at about 1300, or six hours prior to the passage of that force. Had more planes been provided for the three-plane search and had that search been continued by more frequent patrols throughout the day, the Striking Force would probably have been discovered even from the NOUMEA base.

At 0730, May 6th, CTF 17, because of wind and sea, changed course from the northwest to the southwest and commenced fueling TF 17, preparatory for further action which appeared imminent. Weather conditions were otherwise good.

About 1015, radar contact was made on an enemy plane, and about the same time, the NEW ORLEANS reported visual sighting of a Japanese snoop plane on the radar contact bearing. The task force discontinued fueling and assumed an anti-aircraft disposition. Although fighters were directed towards this plane, they did not make contact. CTF 17 decided that this snoop plane had reported his position. This was correct. The Japanese had been informed of the location and composition of TF 17. Actually, their estimate of his location was reasonably accurate; their estimate of his composition was in error in that they reported among other ships, one carrier and one battleship.* There were, in fact, two carriers and no battleships.

CTF 17 reassumed fueling disposition and recommenced fueling.

During May 5th and 6th, intelligence reports from CINCPAC and COMSOWES-PAC, placed a large number of enemy ships in the NEW GUINEA-NEW BRITAIN-SOLOMONS Area. Practically every type of ship was reported and it was fairly

*War Diary of 25th Air Flotilla, Bismarck Area Base Air Force, p.6, 1 April to 11 May 1942, WDC 161725.

definitely determined that three aircraft carriers were in the area. The forces were scattered and there was no common direction of movement.* Actually, but one carrier, and that the SHOKHO, had been sighted in the area. The SHOKAKU and ZUIKAKU were not as yet in the Coral Sea, as they did not round SAN CRISTOBAL Island until 1900, May 5th. The Japanese plan of encirclement by the Striking Force was as yet undetected and apparently unexpected by CTF 17.

By the afternoon of the 6th, it was becoming evident that an advance would be made on PORT MORESBY through the JOMARD PASSAGE in the LOUISIAD Archipelago and that a base would be established in the DEBOYNE Islands. As CINCPAC had given May 7 or 8 as the probable date on which the enemy advance might be expected, ** CTF 17 decided to discontinue fueling, in order to proceed to the northwestward and be within striking distance of possible enemy position by daylight, May 7th. NEOSHO and SIMS at about 1725 were detached to operate to the southward and immediately headed for POINT RYE. Rendezvous for the oilers was on odd days at POINT RYE; on even days at POINT CORN.

CTF 17 made one extended air search on the 5th, which covered the area to the northwest. The radius and limiting bearings of this search are indefinite. He made two extended searches by carrier based planes on the 6th; one in the forenoon, the other in the afternoon. The forenoon search was of the northern sector to a radius to 275 miles; the afternoon search was of the northwest sector to the same radius. Neither of these searches appears to have reported any contacts. This was apparently because, in the morning search, the Striking Force was just beyond the radius of search and, in the afternoon search, it was well within the radius of search but was missed by the pilot of the search plane covering the sector in which the Striking Force was operating. Whether this pilot merely happened to miss the Striking Force through hard luck or whether his vision was obscured in the cold front, is not clear. Certainly the Striking Force was well within the cold front at this time.

Why CTF 17 did not make more long distance searches while fueling is not apparent. This is particularly true regarding the fueling on May 5th, for, on that date, he might have expected strong counter-action from the Japanese because of his attack on TULAGI the preceding day. TF 17 was, at 2400, May 6th, in Latitude 14°-03'S, Longitude 166°-25'E. and about 310 miles, bearing 130°(T) from DEBOYNE.

OPERATIONS OF JAPANESE STRIKING FORCE May 5th and May 6th

Meanwhile, the Japanese forces were continuing their plans for the PORT MORESBY Operation. All had been alerted by the Allied carrier attack

*Action Report, CTF 17, Serial 0782 dated May 27, 1942, para 15, p.4.

**Action Report CTF 17, Serial 0782 dated 27 May, 1942, para. 15, p.5.

on TULAGI. The Striking Force proceeded into the CORAL SEA from its May 4th, 2400 position north of SANTA ISABEL Island. In so doing, it rounded the southeastern tip of SAN CRISTOBAL Island at 1900, May 5th and passed about halfway between SAN CRISTOBAL and RENNELL Islands. At 2400 May 5th the Striking Force was about 45 miles north of RENNELL Island on a north-westerly course, speed 25 knots. By dawn, May 6th, it was well into the CORAL SEA. It continued on a northwesterly course until about 0930, May 6th, when it arrived at a position about 110 miles from West Cape, GUADALCANAL, where it maneuvered for about 2 hours, apparently waiting for information. At 1140 it headed south and continued on a southerly course until about 2000, when it reversed course and headed north. It was on this northerly course and had arrived at Latitude 12°-25'S, Longitude 157°-35'E. by 2400.

During the daylight hours, Commander Striking Force apparently took no special measures for the security of his force, such as long range air searches. As a matter of fact, there seems to be considerable doubt as to whether he launched any carrier planes at all for security purposes, on either May 5th or 6th. This was partially in accordance with Japanese policy to rely heavily on land based aircraft for searches and to leave the carrier for offensive strikes. It could have been also due to the fact that during the afternoon, the Striking Force was, apparently, within the bad weather area of the cold front which was gradually moving to the south. Such a cold front should give reasonable expectancy of protection from air search, especially in view of the variable visibility within the front. However, it should be noted that there were no Japanese air bases nearby, excepting recently captured and recently attacked TULAGI.

Post battle information indicates that had Commander Striking Force made a thorough carrier based search he would probably have discovered, by late afternoon, that CTF 17 was well within range of his attacking aircraft. TF 17 which was fueling, was, apparently, at 1800, distant about 90 miles from the Striking Force, and within the good weather, south of the cold front which was persisting in the area.

Thus Commander Striking Force apparently missed an excellent opportunity to attack TF 17 under conditions disadvantageous to that task force. As stated previously, CTF 17 had searched the northern sector, the morning of May 6th, to a radius of 275 miles, and had failed to locate any Japanese forces in that sector. This seems to have been because, at the time, the Striking Force was to the north and beyond the range of the Allied planes. Thereafter, as TF 17 fueled on a southeasterly course at slow speed in clear weather, the Striking Force rapidly closed the range. The nearest

that these two forces approached each other on these two days was at 2000, May 6 when they were, apparently, about 70 miles apart. This fact was entirely unknown to both commanders, and shows how, in war, there may arise unforeseen opportunities to take advantage of a new favorable military situation and strike the enemy a more serious blow than had been originally intended.*

At about 2000, Commander Striking Force reversed course to the north and apparently commenced fueling operations which appear to have been completed during the night and before 0600. He was on a northerly course at 2400. No reasons have been advanced by the Japanese as to why Commander Striking Force reversed course, but it can be presumed that he felt that he was moving down into waters more controlled by the enemy than by the Japanese, and he was moving away from the Port Moresby Invasion Force which he had been directed to cover. He was, in addition, moving away from his own air and surface support. His decision, therefore, to change course to the north appears logical, and would it not have been wiser if he had changed to a course somewhat north of west? Now that the Port Moresby Invasion Force was underway, he had the responsibility for covering it. Prior to the movement of the Port Moresby Invasion Force out of RABAU, the objective of the Striking Force had been the destruction of the Allied carrier task group wherever found in the Coral Sea, but now that objective became of secondary importance to the protection of the Port Moresby Invasion Force through a suitable covering position. Apparently the reason Commander Striking Force did not go to the westward was that if he did so he might be discovered by Allied planes which were in strength over the LOUISIADE area and the vital element of surprise would be lost. Evidently he wished the enemy to get into a favorable position for striking the Port Moresby Invasion Force and then he would strike them by a surprise attack from the east. As will be shown later, he nearly succeeded in this objective, but, in so doing, he lost the SHOHO.

OPERATIONS OF JAPANESE COVERING FORCE May 5th and 6th

The Covering Force continued patrolling in an area about 50 miles to south of the NEW GEORGIA Islands until about 0028, May 5th, when it reversed course and headed northwestward. At 0200 it was rejoined by the second section of Crudiv 6 which had evidently been recalled. During the early morning, Commander Covering Force desired to launch his ship based planes to search the area to the southwest of TULAGI, but he did not do so as the sea conditions for recovering planes, by Japanese

*Sound Military Decision, U.S. Naval War College, 1942, P.200

methods, were poor. The Covering Force apparently encountered considerable difficulty at this time with its ship based seaplanes.* Whether the Allies would have encountered similar difficulty in the same area is not known. Both TF 11 and TF 17 were launching and recovering seaplanes on the same day, but from a position about 300 miles farther south.

Despite this difficulty in picking up planes, does it not appear that it would have been a wise decision for the Commander, Covering Force to have launched his planes for search and taken his chance on recovering them either at sea, or in some controlled nearby sheltered harbor? It was of extreme importance to the Japanese that the Allied task force which had attacked TULAGI, be located and trailed, and its composition determined. Apparently, Commander, Covering Force decided that this search would be made by planes from RABAU and by planes flown into TULAGI, as well as by the planes of the Striking Force which had entered the CORAL SEA that morning. However, Commander Striking Force did not order any searches, but waited for information as did Commander Covering Force. For some reason, which remains obscure, Commander Covering Force did not choose to employ the planes of the SHOHO for search.

Not being able to obtain any information of the enemy from his own planes and not having received any information from other sources, Commander, Covering Force decided at 0800 that the search phase of his mission was over. He therefore detached the SHOHO and its plane guard, the SAZANAMI, and directed the SHOHO to provide air cover for a fuel convoy of the Port Moresby Invasion Force which had left RABAU at 1800 on the preceding day. By 1400 this air cover was being provided. The SHOHO was discovered by Allied planes at 1035 that date, but no attacks were made on her. Meanwhile, the remainder of the Covering Force, Crudiv 6, headed for SHORTLAND Island where it commenced fueling from an oil supply there, and completed fueling at 0830, May 6th.*

The SHOHO continued her air cover duties until sunset, after which she was directed to fuel at SHORTLAND Island. She arrived at SHORTLAND Island at 0100, May 6th and immediately endeavored to fuel from an oil supply in a stone recess there, but her crew was green and, therefore, although full moonlight was available, fueling did not actually commence until 0630, May 6th.** After one hour's fueling, the fueling was discontinued and the Covering Force, including the SHOHO and SAZANAMI, left SHORTLAND Island at 0830, May 6th.

This practice of the Japanese of establishing fueling depots is considered to have been effective in reducing their logistics problem and shows that the Japanese gave these problems considerable attention. Apparently they had established these depots at vital positions in those areas

*Combat Report No. 7, Crudiv 6, dated 17 July 1942, WDC #180997, p.4.

**War Diary of the SHOHO, WDC # 160465, Group 25, Item 25-J.

where their ships were to operate and arrangements were made for both day and night fueling. Reports indicate that the Japanese were good at night fueling, both underway and at anchor, but the SHOHO did not measure up to this standard. The Allied practice, at this time, in a forward area such as the CORAL SEA, was to fuel at sea from an oiler. This could not always be done and, also, was, normally, not quite so fast as fueling from an oiler at anchor or from a dock.

At about 0830, Commander 4th Fleet postponed the advance of the Port Moresby Invasion Force into the LOUISIAD Area for about six hours, due to suspected presence of the Allied Task Force. At the same time he directed the Covering Force, after leaving SHORTLAND Island, to accompany another fuel convoy of the Port Moresby Invasion Force. This indicates that the control of the operations in the southeast area was tightly held by the area Commander who was ashore at RABAU. The Japanese appear to have felt that the Commander ashore was better able to control strategical operations than was the Commander at sea, because of the many facilities ashore, not the least of which was unrestricted radio.

Meanwhile, the SHOHO, which had not completely fueled at SHORTLAND Island, was directed to completed fueling from the HOYO-MARU--location unknown, but possibly in the fueling group being escorted.

At 1030, May 6th, three Allied B-17s attacked the combined forces at a position about 60 miles south of BUIV. No damage occurred, although some bombs landed within 100 meters of the AOBA. This attack would probably have not occurred had the SHOHO been providing the air cover necessary. However, it appears that no air cover was being provided by the SHOHO which, during the attack, launched her first fighters. After the Allied planes had been driven off, the SHOHO about 1200 provided combat air patrols and anti-submarine patrols for the remainder of the day. This failure of the Commander Covering Force and the SHOHO to provide adequate air cover before 1200 is not explained. Under some conditions, such a practice was effective, but under the conditions existing at this time, and the heavy responsibility placed upon the Commander Covering Force to insure adequate protection for the units of the Port Moresby Invasion Force, it was of doubtful quality. Commander Covering Force must have been aware of the thinness of his land based air searches, he must have realized the inability of such planes to locate an air attack, and he must have known that without radar on his ships he would not be able to pick up an air attack until sighted by eye.

At 1100, Commander Covering Force received word, apparently, from Commander 4th Fleet, that at 1036 that morning, planes of the 25th Air Flotilla had spotted an Allied task force of 1 battleship, 1 aircraft carrier, 3 cruisers and 5 destroyers bearing 192° distant, 420 miles from TULAGI.* The Covering Force was directed to proceed south again.

At 1300, the Port Moresby Invasion Force was sighted by Allied planes and, during the period 1115 to 1500, the Covering Force was located, as

*War Diary of 25th Air Flotilla, 1 April to 31 May 1942, WDC 161725, p.6.

well as were the forces which had arrived at DEBOYNE.

The Japanese now, at 1500 May 6th, considered that the Allies had discovered all of their Port Moresby Invasion Force with its accompanying support units. This was a correct assumption, for it was on the basis of this information that CTF 17 had headed to the northwestward during the nights of May 5th and 6th.

The Japanese estimated that TF 17 was about 500 miles to the southeast of their combined forces now moving into the LOUISIADES. This estimation was correct.

The Japanese further estimated that there was great possibility of an attack by CTF 17 on the following day, May 7th, because they had intercepted radio transmissions from Allied planes, which were shadowing the Port Moresby Invasion Force, which interceptions stated that it appeared as if the objective of the Invasion Force was the seizure of MURUA (Woodlark) Island. This shows that, at that time, the radio transmissions by Allied planes were not secure from Japanese decryption. Information is not available as to whether these transmissions were by voice in plain English, by dispatch in plain English, or by dispatch in code. The latter two are the most probable in view of the fact that the range was too great for voice (about 300 miles). It is possible that the Japanese had obtained the code for that period by breaking it or by recovering it from an Allied plane. This interception of dispatches and the breakdown of codes is of enormous importance in war. Commanders should be aware of the vast organizations set up today for this definite purpose, and should insure that every precaution, in the coding and transmission of messages, is fully observed. The whole Japanese plan was based on the assumption that the Allies would know of the movement of the Port Moresby Invasion Force and would act accordingly. In this assumption they were correct.

At 1520, May 6th, the Commander 4th Fleet at PABAU, directed that present operations be continued. This indicates that he had studied the changing situation with reference to his basic plan and had found that plan sound. A primary qualification for command, is the ability to recognize that the changing situation presents a new problem which requires a departure from the basic plan, or to recognize that the changing situation is in accordance with the basic plan and that no departure therefrom is necessary.

Commander 4th Fleet found no departure from his basic plan necessary. The Allied carrier task force had been located as had been anticipated,* and the Japanese Striking Force was in suitable position and strength to destroy it and was, apparently, as yet undiscovered. The Covering Force was also available to assist the Striking Force in this destruction, as were land based aircraft from PABAU. This was the basic plan, and it was unfolding

*See comments under 25th Air Flotilla, p.52.

according to plan:

The Covering Force continued on a southerly course. It provided combat air patrols for the Port Moresby Invasion Force until sundown 1815, May, 6th. At 2200 it changed course to about westsouthwest and headed for the morning's launching position. At 2400 it was about 90 miles northeast of DEBOYNE Islands.

OPERATIONS OF OTHER JAPANESE FORCES, May 5th and 6th

The Support Force apparently assisted in escorting the Port Moresby Invasion Force for a time but later it seems to have discontinued escorting and headed to the northwest. At 2400 it was 80 miles northwest of DEBOYNE.

The Port Moresby Invasion Force proceeded in a southwesterly direction to a favorable position for passing through the LOUISIADES and was at 2400 about 55 miles northwest of DEBOYNE.

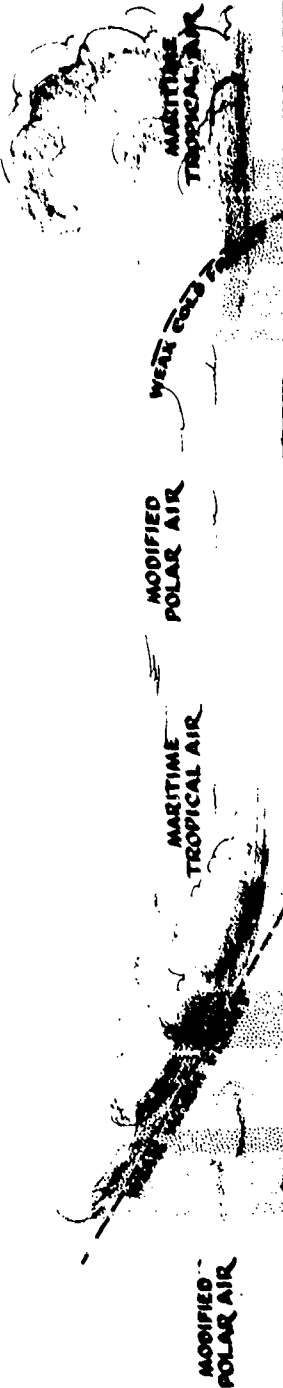
Certain of its escort units, notably, the YUBARI plus Desdiv 29 less YUNAGI, which had been directed to proceed ahead and which had arrived at DEBOYNE about 0130, May 6th, were directed, on the morning of the 6th, to escort the transports, which had been ordered to withdraw to the north because of the possibility of battle. For some unexplained reason these transports were still at DEBOYNE at 2400, May 6th.

The 25th Air Flotilla was thoroughly alert to the presence of Allied task forces in the area, and on May 5th, carried out intense patrol activities throughout the day. The air attack groups were alerted to attack the Allies should a contact be made, but no contact report was received. One flying boat failed to return, so it was assumed that this flying boat had been shot down by Allied carrier planes, but the location was too indefinite to warrant an attack. This estimate, that the flying boat had been shot down by Allied planes, was correct. An alternative attack was therefore made against PORT MORESBY.

On May 6th, this air flotilla continued the searches of the preceding day with somewhat better fortune. At about 1100, one of the flying boats, while on patrol in position 420 miles 192° from TULAGI, made the contact report, previously commented on, of 1 battleship, 1 aircraft carrier, 3 heavy cruisers and 5 destroyers.* This report appears to have been broadcast by Commander 4th Fleet. However, it was not received by Commander Striking Force, as he stated later that he had received no information concerning enemy carriers until the morning of May 7th. Thus it would appear that the communication system of Commander 4th Fleet at PABAU was not functioning adequately, for this contact report should have been relayed directly to Commander Striking Force. Had this been

*War Diary of 25th Air Flotilla, 1 April to 11 May 1942, WDC 161725

CROSS SECTION OF THE ATMOSPHERE, 1100 (-11) 7 MAY 1942



TASK FORCE 17

JAP COVERING FORCE
and
PORT MORESBY INVASION FORCE

THROUGHOUT THE DAY, TASK FORCE 17 OPERATED IN AN AREA OF WIDESPREAD CLOUD COVER, SCATTERED SHOWERS AND RAIN SQUALLS. THIS UNFAVORABLE WEATHER FURNISHED EXCELLENT CONCEALMENT.

THE JAPANESE CARRIER SHOHO WAS DISCOVERED AND SUNK IN A RELATIVELY CLEAR AREA NEAR MISIMA.

AVA-10-47

PLATE II

Had this been done, the final phase of the Battle of the CORAL SEA would, probably, have been fought on the 6th rather than on the 8th. This report was, as usual, inaccurate for there were many more ships in TF 17 than those reported by the plane, and there were 2 carriers. Such inaccuracies in reporting of enemy forces cannot but have an adverse effect upon any commander, and may adversely affect his mental process in the solution of his military problems.

THE ACTION OFF MISIMA

From 2400 May 6th to 2400 May 7th

On the morning of May 7th, TF 17 was in a cloudy area associated with the front which then extended northwest and southeast just to the north of its position. In the early morning there were strato-cumulus clouds covering 5/10 of the sky. By noon the whole sky over the task force was covered with frontal clouds, cumulus, alto-stratus and cirrus. This sky did have sufficient breaks in the clouds so that the task force was enabled to launch and recover planes without difficulty. Visibility was 10 to 15 miles except in scattered rain squalls in the area where it was reduced to less than a mile. The wind was east to east-southeast, blowing at 12 to 22 knots and increasing in gusts to as much as 30 knots in the shower areas.* The frontal area ended about 50 miles to the north of TF 17. In this area to the north, the weather was fine, with unlimited ceiling and with visibility in excess of 20 miles and an easterly wind of 7-15 miles per hour.

As TF 17 moved northwestward on the morning of May 7th, CTF 17 ordered that air searches be made in an effort to locate the most suitable objectives for action and to obtain positive or negative information regarding enemy carriers of whose movements no information had been received since the previous afternoon. At 0619, the YORKTOWN launched 10 scouting planes (SBD) to search the sector between 325°-085° (T) to a distance of 250 miles. This embraced most of the LOUISIAD Archipelago and the CORAL SEA to the north and east of the LOUISIAD Archipelago. All of these scouts completed their searches with the exception of the scout with the sector median 067° (T). This scout returned, after covering about 165 miles, because of bad weather. This practice of returning, when bad weather was encountered, was generally sound for the early days of 1942, because none of the carrier aircraft involved were equipped with radar or other advanced navigational devices, and the pilots saw nothing when in fog or similarly dense weather. CTF 17 felt that all 3 enemy carriers might be within striking distance and he stated afterwards that "Unfortunately, the search to the east-northeastward was not completed due to bad weather." Thus the retirement of this plane denied CTF 17 the positive or negative information that he was seeking and, necessarily, confused his estimate. This shows the effect of incomplete searches, and stresses the necessity

*The Battle of the CORAL SEA, Aerology Section, Office of Chief of Naval Operations, April 1944.

for a pilot to carry out his scouting task if it is humanly possible. His responsibility to his basic plan is exactly the same as the responsibility of the Captain of a surface combatant ship to his basic plan. When a pilot finds his basic plan challenged he must then and there re-estimate his basic situation as does the Captain of a surface combatant ship.

By 0625, May 7th, TF 17 was in latitude 13°-20'S., Longitude 154°-21'E. CTF 17 here detached T.G. 17.3, the Support Group consisting of the heavy cruisers AUSTRALIA and CHICAGO, the light cruiser HOBART and the destroyers PERKINS and WALKE plus the FARRAGUT, all under the command of Rear Admiral J.G. Grace, R.N. He sent this group on ahead to attack enemy transports and light cruisers which were reported to be heading for PORT MORESBY via JOMARD PASSAGE. CTF 17 stated that he had detached this group because he expected an air duel with enemy carriers presently, and it was possible that his task force would suffer heavily. By detaching this group he hoped to have it free from damage and therefore able to drive back the Port Moresby Invasion Force.*

Future students of this battle will, no doubt, view this reasoning of CTF 17 with great interest, as he appears to have minimized the Japanese capability of attacking the Support Group which was operating without air cover. The Support Group was attacked by the Japanese, as it was a definite menace to their planned operation; it was also attacked by three U.S. Army bombers because of faulty recognition. Fortunately, it escaped without damage.

CTF 17, in addition, appears to have minimized the effect that the detachment of the Support Group might have on his anti-aircraft defenses. Perhaps he was motivated, in this detachment of the Support Group by the thought that neither of the Australian cruisers had maneuvered with TF 17.

The Support Group in no way accomplished its mission. It retired without mishap. It thereby was saved for later action, but it was lost to the Battle of the COPAL SEA for which it was intended. Its detachment appears to have accomplished two effects, however. One was to confuse the Japanese as to the strength and location of the Allied Forces***--the other was to cause the Japanese to expend on this surface force their land based air power which might otherwise have been directed against TF 17.

Meanwhile, CTF 17 continued on to the northwestward. At 0735 a YORKTOWN scout reported 2 Japanese heavy cruisers in Lat. 10°-40' S., Long 153°-15' E. on course 310°(T), speed 12 knots. These ships challenged him by flashing light. At 0745 a YORKTOWN scout shot down a Japanese twin float single engine seaplane over MISIMA Island. One hour and twenty minutes later another YORKTOWN scout shot down a similar seaplane in Lat. 11°-35'S, Long. 156°-43'E. All of these contacts were at a considerable distance from TF 17 and, although they did disclose the fact that an Allied carrier

*Statement by CTF 17 to Commodore R.W. Bates, U.S.N., Head of the Department of Analysis, Naval War College - October 1946.

**Combat Report #7, CruDiv C, Period 25 Apr. 1942 to 11 May 1942, dated 17 July 1942, WDC # 160997 - p.8.

was within 300 miles, they did not necessarily indicate its location with any degree of accuracy. At 0815 a YORKTOWN scout reported 2 CV and 4 CA in Lat. 10°-03' S., Long. 152°-27' E, course 140° (T), speed 18-20 knots. This contact appears to have been correct in longitude but somewhat off in latitude.

Preparations were immediately started to launch attack groups from both carriers. CTF 17 apparently felt confident that these were two of the three enemy carriers reported in the area and he was determined to destroy them as soon as possible. He, therefore, directed that a combined attack group be launched from both the LEXINGTON and YORKTOWN, while making the above preparations an unidentified radar contact appeared on the screen at 0833 on bearing 295°(T) distant 30 miles. An element of the combat air patrol was vectored out but failed to intercept the contact.

At 0926, the LEXINGTON commenced launching her attack group. About one half hour later at 0944 the YORKTOWN commenced launching her attack group.

When this order to launch planes was issued and received is not known. The LEXINGTON War Diary states that at 0915, CTG 17.5, Air Group Operation Order Number One was placed in effect with objective enemy carrier. If this order was the one initiating the launching of the air groups, then the launching was commenced within eleven minutes of its issuance by the LEXINGTON and within twenty-nine minutes of its issuance by the YORKTOWN.

Launching took place within 210 miles of the 0815 reported position of the enemy carriers, and by 1030 both of the attack groups were well on their way to the targets.

The LEXINGTON Attack Group consisted of 15 VB of Bombing Squadron Two, each armed with one 500 pound bomb and two 100 pound bombs; 10 VS of Scouting Squadron Two, each armed with one 1000 pound bomb; 12 VT of Torpedo Squadron Two armed with torpedoes; and 10 VF of Fighter Squadron Two. The LEXINGTON Air Group Commander accompanied his Air Group with 3 additional VSB, each of them apparently armed with bombs. The YORKTOWN Attack Group consisted of 17 VS of Scouting Squadron Five; 8 VB of Bombing Squadron Five; 10 VT of Torpedo Squadron Five; and 8 VF of Fighting Squadron Forty-Two. In this latter Air Group, the VS and VB were each armed with one 1000 pound bomb, and the VT with torpedoes. The YORKTOWN Air Group Commander was not launched with his air group but remained in YORKTOWN as Fighter Director Officer.

The YORKTOWN search groups returned aboard the YORKTOWN shortly after the Attack Groups had been launched, and it was then discovered that, due to an improper arrangement of the pilots' code contact pad, the contact report of 2 enemy carriers and 4 heavy cruisers in Lat. 10°-03' S., Long. 152°-27' E. was in error. For, instead of these ships, what the pilot had actually seen, was 2 heavy cruisers and 2 destroyers. Thus the attack groups had been launched on a false mission. This indicates the necessity

for insuring that all pilots are adequately trained, and exercise the proper precautions in communications, as well as in combat technique. Errors of this kind, which may seem slight at the time, may force the Commander into an unsound decision.

CTF 17 was now placed in the position of having to determine whether his air plan should be changed, or whether it should, instead, be carried out. He was in a serious position. No enemy carriers had been seen and yet, if the analysis of the previous day was correct, three of them were in the area. No information is available as to his reactions at this point. Possibly the course of action of recalling the planes suggested itself. However, he had the moral courage to resist this suggestion, for it was apparent that he was in better position to receive an air attack with his attack planes in the air than he was with them on deck, and, besides, were they not well on their way? That this decision was wise was apparent, in view of the report received at 1022 from ComSoWesPac, that at 0748, an Army B-17 had sighted, in Lat. 10°-34' S., Long. 152°-56' E., 1 carrier, 16 miscellaneous warships and 10 transports on course 295° (T). The plot of this report indicated that it was probably the same force, or part of the same force that had been reported by the YORKTOWN, although it appeared to be about 55 miles to the southeast of the original contact. A study of the Japanese positions at this time, as now available, shows that this latter contact, as made by the Army, was actually made on the Port Moresby Invasion Force and that the carrier reported was not in company with this force but was, instead, about 25 miles to the northeast. The carrier had not yet been located and was not located until about 1055 when the LEXINGTON Attack Group, which was in the van, made contact with the enemy north of MISIMA and noted 1 CV, 2 or 3 CA's and 1 or 2 DD's in the force sighted.*

At 1021, CTF 17 received a dispatch from the NEOSHO, repeated several times, stating that she was being bombed by three aircraft in Lat. 16°-50' S., Long. 159°-08' E. She had previously reported sighting many planes in this same position at 0930. CTF 17 stated later that he did not know what type of aircraft had attacked the NEOSHO and that it would have been extremely valuable information to have known that they were carrier planes. A study of locations and distances involved would indicate that the place where the NEOSHO and SIMS were bombed was, apparently, beyond the range of land based bombers from RABOUL and, therefore, the planes were most probably carrier planes.

At 1100 a section of the YORKTOWN combat air patrol shot down a KAWANASHI flying boat about 15 miles from the task force. This plane had been picked up by radar at 1044 bearing 045° distance 41 miles closing.

When first sighted the Japanese force was steaming into the wind at about 20 knots, but, as the attack groups approached, it commenced maneuvering. The first attack was apparently made by the LEXINGTON Air Group Com-

*Report of action, Scouting Squadron Two, CORAL SEA, May 7, 1942.

mander with his two wing planes, for the SHOH reported that the first attack was made by 3 dive bombers. These planes made near misses. Although it was the practice in those days for the Air Group Commander to lead attacks, this practice was found to be unwise as his basic function is the overall tactical command of his group involving target designation and coordination of attack. If he makes the first attack, he automatically violates that responsibility and exposes himself unnecessarily to the hazards of anti-aircraft fire at close range.

This attack group of 3 dive bombers was followed at 1110 by the 10 VS of Scouting Squadron Two which was not particularly effective, making, at the most, several near misses. After this attack had been completed, the SHOH endeavored to launch additional fighters, and, apparently, succeeded in launching 3. As she already had 3 in the air, this would indicate that her sole air defense consisted, at the most, of 6 fighters.

During the time that the SHOH was launching the above additional 3 planes, she was heavily attacked by the remaining attack squadrons of the LEXINGTON and by the attack group from the YORKTOWN, forcing her to cease launching and to take evasive action. This attack covered the period between 1120 and 1130 and was fairly continuous, so that the hits made by any one squadron cannot be determined. The SHOH reported that she had been hit by 2 bombs at 1120 which disabled her after flight deck elevator, and about the same time received a torpedo hit on her starboard quarter, which caused her to lose headway.*

The order of attack appears to have been about as follows: between 1117 and 1122, both remaining LEXINGTON squadrons; 1125 to 1130, YORKTOWN Air Group. Bombing Squadron Two and Torpedo Squadron Two attacked in a coordinated attack and reported that, as they commenced their attack, they noted no evidence of fire on the SHOH and that the carrier was circling at high speed. Bombing Squadron Two reported hitting the SHOH at 1120, with 1000 pound bombs and this checks with the SHOH's report.*

The torpedo planes were greatly helped by the bombing attack and were able to gain an advantageous position before dropping their torpedoes. This squadron reported that its torpedoes were dropped between 1119 and 1122 and made numerous hits. This proves that close coordination existed between Bombing Squadron Two and Torpedo Squadron Two. The success of these two squadrons plainly shows the great value of coordinated attacks.

The YORKTOWN Air Group apparently commenced its attack after the initial attack by Scouting Squadron Two had been completed, and at about the same time or very shortly after the other squadrons of the LEXINGTON Air Group had commenced their attack. Scouting Squadron Five dropped its first

*War Diary of the SHOH, WDC No. 160466, Group 25, Item 25J, p.2.

bomb at 1125 and was followed very closely in the attack by Bombing Squadron Five and Torpedo Squadron Five. As the carrier was apparently almost dead in the water with her fore and aft axis into the wind, the YORKTOWN pilots were presented with a very favorable target situation. The squadrons undoubtedly made many hits but claimed much more success than the Japanese admit.

Damage Inflicted

(a) LEXINGTON

Hits claimed on carrier

Scouting Squadron Two	2
Bombing Squadron Two	5
Torpedo Squadron Two	9

(b) YORKTOWN

Hits claimed on carrier

Scouting Squadron Five	9
Bombing Squadron Five	6
Torpedo Squadron Five	10
Total bombing hits claimed	22
Total torpedo hits claimed	19

The Japanese admitted 15 bomb hits and 7 torpedo hits. This shows the great difficulty in estimating hits on a target being hit by many bombs and torpedoes at approximately the same time. Suffice it to say, that at 1135 the SHOHU sunk.*

Scouting Squadron Two claimed one bomb hit with a one hundred pound bomb on a cruiser and Bombing Squadron Five claimed one hit or near miss with a 1000 pound on a similar type vessel. The target in each case was claimed to have sunk shortly afterward. Japanese records, however, show the SHOHU to have been the only ship damaged or sunk in this action.

The combined air groups claimed that during the course of this attack they shot down 9 enemy fighters and 2 enemy scout bombers. One additional twin float seaplane was shot down near MISIMA Island while en route to the Target. The SHOHU records indicate, however, that at the height of the attack she had only 6 fighters in the air, and that the pilots of three of these planes were later recovered at DEBOYNE Island, where they had made

*War Diary of the SHOHU, WDC #160465, Group 25, Item 25J, p.2

a forced landing in the vicinity of one of their seaplane tenders.

Aircraft losses sustained by TF 17 in this attack included 1 VSB shot down by enemy aircraft, 1 VSB missing, and last seen on the return flight when it broke off to attack an enemy aircraft, and 1 VSB damaged by enemy AA fire and directed to land at ROCSEL Island.

The number of fighter escorts accompanying each of the attacking air groups was not sufficient to provide adequate protection for the bombing and torpedo squadrons had they encountered the fighter protection that might have been expected over the two carriers they were launched to attack. The YORKTOWN Air Group included one division of 4 fighters assigned as escort for Bombing Squadron Five and another similar division of fighters assigned as escort for Torpedo Squadron Five. Ten fighters were included in the LEXINGTON Air Group. Four of these fighters were assigned to cover Torpedo Squadron Two and the remainder were assigned to Bombing Squadron Two. These latter fighters did not follow down with their bombers to the attack, with the result that the bombers experienced some interference from 2 Japanese fighters.

This lack of fighter strength with the attack groups was realized by CTF 17, but additional fighters could not be spared for the attack groups without seriously endangering the safety of the carriers and other surface ships of the task force. As a result of experience gained in the Battle of the Coral Sea, the allowance of fighters for a carrier was increased from 18 to 27.

An analysis of these attacks on the SHOHO shows that better coordination would have been achieved if, as was done in later actions, there had been an overall tactical commander, now termed Air Group Strike Commander, in the air. Had such a Strike Group Commander been in command over the SHOHO, it is quite possible that he might have diverted some of the attack to the cruisers in the screen. As it was a total of thirty-seven 1000 pound general purpose bombs, ten 500 pound general purpose bombs and twenty-two torpedoes were launched at the SHOHO.

At about 1240 TF 17 commenced landing its attack groups and by 1338 had recovered all of the returning planes. No further missions were ordered for these attack groups that afternoon. This decision was based on the estimate of the situation which CTF 17 made at the time. He considered the advisability of sending in another attack and of launching another search. He felt, however, that the probability of finding a suitable objective near the scene of the morning attack was not great and that the location of the Striking Force, although unknown to him, might quite possibly be within carrier range. Radio contacts and radio interceptions, throughout the morning, indicated that his position and disposition were known to the enemy. Inasmuch as

enemy carrier forces were probably in the vicinity, he did not believe that any other objective should be considered for his air groups, but that they should, instead, be held for a counterattack on these carriers, once they had disclosed their presence. He noted that flying conditions and visibility, in his vicinity, were becoming increasingly bad and that frequent rain squalls were being encountered. He realized that if the enemy were located by an extensive search, it was quite probable that there would be insufficient daylight for an attack. He therefore decided to rely upon shore based aircraft to locate the enemy carriers.*

This analysis of CTF 17 does not appear complete, for numerous suitable targets remained in the DEBOYNE area and had been reported by Army aircraft. Among these were transports and warships of various types, none of which had been in the force that his carriers had attacked. It does appear, however, that CTF 17 could not have located these targets, attacked them, and relanded his planes during daylight. His decision not to attack them appears, therefore, to have been sound.

At 1623 a contact was made by radar on an unidentified aircraft closing on bearing 250°, distance 18 miles. An element of the combat air patrol was vectored out but failed to intercept. This contact came within visual range of TF 17 at 1629 and was identified as an enemy sea-plane. Another element of fighters was vectored out to intercept it but they failed again to make contact and the contact disappeared off the screen at 1647.

At 1747, a large group of enemy planes was picked up by radar, bearing 145°, distance 48 miles. A plot of their track showed them initially to be closing the Task Force, but, at about 25 miles, they veered to the left and took up a westerly course. An element of the LEXINGTON combat air patrol was vectored out to intercept this contact and, after flying on instruments for a portion of the way, made contact with what they identified as nine zero type fighters retiring in a southeasterly direction at 1000 feet altitude. In the attack that followed, five enemy planes were shot down. In the meantime, additional combat air patrols were launched by the LEXINGTON and YORKTOWN and at 1803 six YORKTOWN fighters were vectored out to the same contact. On the way out they passed over a formation of enemy planes which promptly disappeared in the haze. Two YORKTOWN planes attacked them, with the loss of one YORKTOWN plane. The remaining five YORKTOWN planes shortly thereafter, made contact with a group of enemy carrier based dive bombers and shot down one of them. The weather at this time was very bad, with many squalls, and poor visibility, so that sight contacts with enemy planes were only momentary. The combat air patrols were returned to TF 17 by means of the YE homing equipment.

*Action Report CTF 17, Serial 0782 dated May 27, 1942 Para. 18, p.6.

The Japanese planes shot down at this time were part of a group of attack planes launched by the Striking Force at 1615. These planes were reported by the Japanese to have been 12 dive bombers and 15 torpedo planes.* If this is true, then the planes intercepted by the LEXINGTON combat air patrol must have been of this type, and not fighters as described by the LEXINGTON in its action report.

At 1850, three enemy planes flew by the starboard side of the YORKTOWN with their lights on and blinked in Morse Code on an aldis lamp. They crossed over the bow of the YORKTOWN to port and were fired on by a fighter of the combat air patrol.

At 1910 while TF 17 was landing planes, three enemy planes attempted to join the landing circle. They were fired upon by various ships in the formation and one of them was reportedly shot down.

As a result of the action between the combat air patrol and the enemy planes intercepted about 1800, the LEXINGTON and YORKTOWN each lost one fighter. After the combat patrols had landed, an additional fighter was missing, but he evidently became lost in the melee around the ship, for radio communications were established with him and every effort was made to get him back on the radar screen and back to the ship. At 2028, being still unable to locate him, the YORKTOWN directed him to proceed toward TAGULA Island and try to make land while he still had sufficient fuel.

Between 1900 and 1950, LEXINGTON radar had unidentified contacts on planes circling on bearing 080° (T) about 30 miles from the disposition. Inasmuch as the enemy planes that tried to join the landing circle at 1910 had been seen to move off in this position, it was assumed, in the LEXINGTON, that this radar indication may have been on enemy planes in a landing circle about Japanese carriers.** The LEXINGTON reported the indicated presence of enemy carriers only thirty miles to the eastward to CTG 17.5, Commander Air Task Group, who, in turn, reported it to CTF 17.*** This information was not received by CTF 17 until 2200 or two hours and a half after the contact had faded from the screen. The YORKTOWN radar did not indicate a situation similar to that claimed by the LEXINGTON, but it did indicate that at about the same time, a single plane was circling at 25 to 30 miles on bearing 060° (T) and was later tracked on course 310. This was believed, at the time, to be the missing YORKTOWN fighter that was eventually directed to proceed to TAGULA island in the LOUISIAD ARCHIPELAGO.****

Why this information was not reported to CTF 17 for about 2½ hours is not known, but it is presumed that this thought of landing on a carrier,

*Japanese Notes of Battles, CinC Combined Fleet log Coral Sea Action of May, USSBS (Pacific) Interrogation of Japanese Officials, Vol.II, page 539.

**LEXINGTON Action Report-Battle of the Coral Sea, Serial 0100 dated 15 May 1942, Para. 11, p.4.

***CTG 17.5(ComCarDivOne)Action Report-CORAL SEA-Ser. 0251, dated 18 May 1942, Para. 7, p.2.

****CTF 17 Action Report-Battle of CORAL SEA-Ser. 0010N, dated 27 May 1942. Para. 19, P.6 and 7.

was not given serious weight until later. Where the delay in transmitting the information to CTF 17 occurred is also not known, but it could have occurred in plot; in the mind of the LEXINGTON's Captain; or even in the mind of CTG 17.5, Commander Air. In any case, it indicates the importance of reporting immediately to the Force Commander any new information on enemy contacts. Actually, these planes could not have been landing on a carrier, for the plot from information now available shows that the enemy carriers were, at the time, at least, 95 miles away. They may, however, have been circling in order that they might be guided home by direction finder bearings from their carriers.

During the early afternoon CTF 17 had decided that the enemy would continue on towards PORT MORESBY and would probably pass through JOMARD PASSAGE by morning. Although he had not located the two Japanese carriers additional to the SHOHO assumed to be in the area, he felt that at least one of them would accompany the Port Moresby Force. Therefore he had decided to head to the northwestward during the night to intercept that force, the destruction of which, was his primary objective.

However, the conflicts with enemy planes, above referred to, and the fact the LEXINGTON had reported that the enemy carriers were fairly close, caused him to reconsider his decision. For he now was faced with a situation which challenged his basic plan. What should he do? He considered making a night attack against the enemy carrier force, but decided against such an attack on the sound ground that the information was too doubtful, and besides, some of it, especially that from the LEXINGTON, was now three hours' old and therefore would not indicate the enemy's position very accurately. He felt also that he could not spare a strong enough raiding force, for the Support Group was away, and the remaining supporting ships were required for the defense of his command. Should he detach them on a night search and attack, and should they not be able to rejoin by daylight, he feared that not only they, but also the LEXINGTON and YORKTOWN might have to cope with a disastrous air attack next morning before rejoining could be effected.* Perhaps he regretted now that he had detached the Support Group. However, it was well that he decided as he did, for had such an attack been launched it would have failed, as the enemy carriers were, as previously stated, 95 rather than 30 miles away.

CTF 17 continued on a southeasterly course, and, at 2400 was in Lat. 14°-03' S., Long. 155°-36' E.

ATTACK ON SUPPORT GROUP - May 7th

Meanwhile, TG 17.3, Support Group, continued on to the westward at 25 knots. At 0810 an enemy twin float monoplane was sighted by the CHICAGO,

*CTF 17 Action Report-Battle of Coral Sea, Ser. 0010N, dated 27 May 1942, Para. 19, p.6 & 7.

but it remained beyond gun range for one-half hour at a distance of approximately 20,000 yards. During the morning two additional contacts were made, both on Army reconnaissance bombers. One of these contacts was at 0940, the other at 1138.

At about 1300, approximately 12 so-called Japanese carrier based dive bombers approached the formation but retired without attacking. Where these planes came from is not known, but it is assumed that they were fighters from RABAUl that had become separated from the bombers and torpedo planes which they had been escorting.

At 1345 radar indicated that a group of planes was approaching and was about 28 miles away. At 1357 this group was sighted and proved to be 10 enemy single engine monoplanes. All ships that bore opened fire but made no hits. The enemy planes retired at 1403.

At 1415 radar indicated a group of planes bearing 250°(T) distant 75 miles and, at 1426, another contact was made on a group of planes bearing 030°(T) distant 45 miles. At about 1438, 12 twin engine Japanese aircraft made a torpedo attack, approaching from dead ahead. The Support Group opened fire and, during the attack, succeeded in shooting down 5 of the enemy planes. This torpedo plane attack was pushed well home. A number of the planes managed to get into the formation and strafed the various ships as they passed. Only 8 torpedo tracks were observed; these were apparently directed, 3 against AUSTRALIA, 1 against HORART and 4 against CHICAGO.* Two torpedo planes were shot down before they dropped their torpedoes and another two torpedoes may have made erratic runs due to damage received by the planes before they were released. This is the simplest indication of the need for accurate gunfire at long range against planes of this type. Such planes must be destroyed before they can arrive at the desired launching positions.

Upon the completion of this torpedo attack, a group of 19 high altitude bombers appeared dead astern of the task force, made their approach, and at 1440 from such a high level (15000-20000 feet) that the A.A. batteries had no effect. All bombs missed. The point of aim of these horizontal bombers appears to have been the AUSTRALIA which was straddled by bombs, two of which were close enough near misses as to shake.** The pattern of this bomb attack was about 500 yards in diameter so that it appears to have been a well coordinated small pattern attack. The fact that it missed was unfortunate from the Japanese viewpoint. The Japanese made an effort in this attack to coordinate the torpedoes with the bombs, and succeeded to the extent that the bombs fell within two minutes after the torpedoes had passed. The individual ships of the task group maneuvered to avoid the bombing attack and it is possible that this saved them from possible hits by the near misses.

Some minutes after the high level bombing attack had been completed, two

*CTF 44 Action Report, Attack by Torpedo Bomber and High Level Bomber Aircraft-dated 21 May 1942, Para. 10 and 21.

**CTF 44 Action Report-Attack by Torpedo Bomber and High Level Bomber Aircraft-dated 21 May 1942, Para. 13.

multi-engine land bombers, followed by a third similar plane, appeared at about 20000 feet and dropped 5 bombs which missed the FARRAGUT by about 200-300 yards. It appeared later, after the photographs taken by the above planes had been developed, that these 3 planes were U.S. Army B-26 from AUSTRALIA.*

During the late afternoon the Support Group was apparently shadowed by a number of Japanese snoopers but no further attacks developed.

As a result of these attacks Commander Support Group headed in a southerly direction until about 1930 when he headed on a westerly course, 285° (T), speed 25. At 2400, May 7th, his group was in Lat. 12°-44' S., Long. 149°-59' E.

The Attack on and Loss of NEOSHO and SIMS, May 6th

The NEOSHO and SIMS, upon being detached at 1725, May 6th, immediately headed for POINT RYE in accordance with fueling arrangements. They had reached a position at Lat. 16°-01' S., Long. 158°-01' E., by about 0730 May 7th, when they began to contact planes both by radar and visually. At 0859 the SIMS, which was ahead of the NEOSHO as an anti-submarine screen, was attacked by a single reconnaissance type plane, but was not hit by the bomb dropped.

Both ships commenced speeding up and preparing for attack. Japanese planes appeared in groups about as follows:

- (a) At about 0900 fifteen aircraft appeared bearing 025° (T) from the NEOSHO at high altitude. These planes did not attack and it is presumed that they were the torpedo planes which were not employed in this phase of the action.
- (b) At about 1003 ten aircraft approached from 140° (T). Three of these planes attacked the NEOSHO, dropping three bombs from high altitude. All fell close aboard to starboard. The NEOSHO opened fire with anti-aircraft battery but made no hits, and the Japanese planes flew away.
- (c) (1) At about 1131 approximately 24 enemy dive bombers were sighted at high altitude. These made heavy attacks from all directions for about 15 minutes and succeeded in hitting the SIMS 3 times with what appeared to be 500 pound bombs. These hits were made by 4 Japanese planes which dove so low as to be destroyed by gunfire or by the blast of their own missiles or by both. The SIMS was sunk, but some of her personnel were saved by the NEOSHO.

*C1F 44 Action Report-Attack by Torpedo Bombers and High Level Bomber Aircraft-
dated 21 May 1942. Para. 12.

(2) These bombers attacked the NEOSHO also and she received 7 direct hits and 8 near misses. In addition, she suffered heavy damage from a suicide plane which, having been damaged, chose to crash on her deck.

Soon after the last bomb fell the NEOSHO prepared to abandon ship. No order to do so was given but many of the personnel abandoned ship anyway, indicating a falling off of discipline because of the attack. Finally most of these men were recovered and brought on board again.

All hands fought the fires caused by the attack and succeeded in getting them under control. However, the NEOSHO gradually filled with water. She remained afloat for several days drifting northwest.

By 1112 May 9th, her position was determined to be Lat. 15°-35' S., Long. 156°-55' E.

At 1200 May 10th an Australian Hudson appeared and was notified of the NEOSHO's difficulties, but no help appeared as a result of this contact. There is no information available as to whether this plane reported this incident or not.

At about 1100 May 11th the NEOSHO showed signs of sinking, so a final conference was held to decide on abandoning ship. However, about this time a Navy PBV from NOUMEA appeared and soon guided a destroyer, the HENLEY, to the scene. By 1342 all personnel had been removed and the NEOSHO was then torpedoed by the HENLEY with 2 torpedoes. She sank at 1452 in Lat. 15°-38' S., Long. 155°-36' E.

It appeared afterwards that the long delay in finding the NEOSHO was due to an error in navigation by the Navigator of the NEOSHO, who had reported her position incorrectly.

OPERATIONS OF JAPANESE STRIKING FORCE, May 7th

The Striking Force continued on a northerly course until 0115 May 7th, when it changed course to the southeastward and at 0200 to almost due south. This reversal of direction was apparently due to the fact that Commander Striking Force, failing to receive any information concerning the Allied Carrier Force since it had attacked TULAGI, had made an estimate and had decided that it was an enemy capability to be to the south and had decided to search in that area before he moved into a favorable covering position to the westward.* He knew where his own forces were and, in particular, he knew that the Port Moresby Invasion Force which he was directed to cover, was in the vicinity of and approaching JOMARD PASSAGE.

This action of Commander Striking Force appears logical. The fact that the Allied Force had not been located by planes from RABUL, LAE or TULAGI

*Supplemental Report-TRUK-Naval and Naval Air Field Team No. 3, USSBS, p.28-B.

appeared to place that force beyond the normal search range of Japanese search planes operating from the above bases. Commander Striking Force, if he wished to make sure that the southern areas were adequately searched, was forced therefore to augment these searches by his own carrier based aircraft.

By 0600 May 7th the Striking Force was at Lat. 13°-12' S, Long. 158°-05' E. or 155 miles 234 degrees from the western tip of RENNELL Island. At this time a search flight was launched from the carriers to search a southerly sector between 180° to 170° (T) to a distance of 200 miles. Commander Striking Force had planned to search the southwest sector between the bearings 180° and 170° (T). But he was not satisfied with this plan because it did not cover the southern area adequately, and he feared that the Allied carriers might get behind him as he moved to the westward. He, therefore, increased the sector search to include 20 degrees to the southeastward.*

Had this sector search to the south not been increased in scope, the southern area searched would have been found vacant. Commander Striking Force having obtained this much negative information could then have dismissed the southern area from further consideration for the present, and could have searched for the enemy to the westward, where the enemy might also be. However, the increase in sector search to the south was made and resulted in the discovery at 0736 of the NEOSHO and her escort SIMS, which were entirely alone.

This discovery was reported promptly by the search planes. However, the report was incorrect in that it stated that the Allied Carrier Task Force had been discovered. This failure of the Japanese reconnaissance pilots adequately to develop the contact of the NEOSHO and SIMS was, from the Japanese viewpoint, regrettable. It was, however, not unusual in these early days for either the Japanese or Allies, and was particularly bad on both sides during the Coral Sea Operations. One important reason for this was that recognition training was still in its infancy. A further reason, but only on the Japanese side, appears to have been the fact that the Japanese knew that the Allies had radar and, therefore, if the reconnaissance plane closed in to develop the contact, it stood a great chance of being intercepted and shot down by Allied aircraft. This had already occurred!

It will be remembered that CTF 17 had fairly definitely established that three Japanese carriers were in the sea area between NEW GUINEA, NEW BRITAIN and the SOLOMON Islands, known as the SOLOMON SEA, when, as matter of fact, but one was in that area and that was the SHOHU. The other two, the SHOKAKU and ZUIKAKU were in the eastern part of the Coral Sea. This had had an adverse effect upon CTF 17's estimate of the situation, and, as will be apparent later, nearly resulted in disaster.

Now the Japanese pilots had made an error in recognition with a most adverse effect upon Commander Striking Force's estimate of the situation!

*Supplemental Report-TRUK-Naval and Naval Air Team No. 3, USSBS P.28-B.

This indicates, to quote CINCPAC sometime later, "If there is one lesson we have learned from the Pacific War, it is that constant training in visual recognition and identification for all topside battle station personnel on board ship and for all aircraft personnel, is of vital and urgent importance."*

Commander Striking Force believing that he had found the Allied carriers, directed that a full out attack by all carrier based planes be made against them. This attack was launched at 0815. No figures are available to indicate exactly what the Japanese meant by "full out" attack, but it is presumed that a full out attack was all planes available after the necessary combat air patrol had been provided.

It appears that, upon arrival at the target, the attacking planes discovered that the carriers reported were not carriers at all but were, instead, an oiler and a destroyer. For that reason the torpedo planes were not employed, and reliance for destruction was placed upon coordinated attacks at varying times by the escorting fighters, the dive bombers and upon what the NEOSHO said were twin engined bombers, which would have had to come from RABAU, 790 miles away. This report by the NEOSHO appears to have been another error in recognition, as there are no claims by the Japanese of attacks on the NEOSHO and SIMS by land based aircraft. Such attacks would have been scarcely feasible with an armed two-engine bomber, as her maximum effect combat radius was normally about 700 miles.

Information from Allied sources indicates that most Japanese planes appeared in groups at about 0900, 1003 and 1131. The group which appeared at 0900 did not attack; the other groups did attack and succeeded in sinking the SIMS and seriously damaging the NEOSHO. They did not make coordinated attacks, but attacked in small groups or even singly. In the 1131 attack the attack lasted for about 15 minutes. In making these attacks the Japanese lost 6 planes.

In view of the manner in which the attacks were made it would appear that either each Japanese Air Group Commander made decisions on his own, or that there was an overall Air Group Strike Commander at the scene of combat who controlled all planes. The former seems more likely, in view of the lack of coordination in attack. Evidently the Commander of the torpedo planes decided, in view of the paucity of targets presented, that he would not waste his torpedoes. Such a decision appears sound, especially in view of the expected battle with Allied carrier task forces.

During the time that this attack was underway, the Striking Force continued in the direction of the reported Allied carrier task force (NEOSHO and SIMS), presumably in order to reduce the air travel for the

*Recognition-Instructor's Manual, Part I, Navpers 16045A, December 1945.

attacking planes and, in particular, for any planes damaged.

Prior to the return of any of his carrier planes which had been launched to attack the Allied carrier task group, Commander Striking Force received word of the sinking of the SHOHU. This was a great surprise to him as he had thought that the force he was attacking to the south was the Allied carrier force.* He now knew, in view of his knowledge of the approximate position of the SHOHU, that the Allied carrier task force was necessarily to the west of him and not to the south, and, therefore, the force he was attacking was not the carrier task force he was seeking. About this time, 1045, he was informed, apparently, that the force to the south consisted of an oiler and a destroyer only. To quote Japanese sources, "It caused Admiral Hara much chagrin to realize that he had disclosed to the enemy, the presence of his force in the Coral Sea. Admiral Hara emphatically stated that, if he had known there were no carriers in the oiler group, he would not have disclosed his position by attacking.** In this connection, does it not appear correct that Commander, Striking Force should have considered that knowledge of his presence was a definite Allied possibility? Was the fact that he had not been attacked, necessarily, an indication that he was undiscovered? Might not this fact have been an indication that the enemy was avoiding action with the carrier force in order to destroy the Port Moresby Invasion Force?

Commander Striking Force took immediate action. At about 1045 he changed to the west to course 285° (T) in order to close the enemy which he now knew must be in that direction. At 1130, on this new course, he recovered his planes, which had attacked the NEOSHO and SIMS. As the Japanese did not have homing devices on their carriers, this would indicate that Commander Striking Force had broken radio silence to communicate with his planes. In view of the urgency of his operations, such a decision appears sound even though it might have cost him the factor of surprise.

At about 1530 he launched planes to search the sector 225° to 315° (T) to a radius of 200 miles. There is no indication of the number of planes used, but it is to be assumed that they were sufficient in number to search the sector adequately. He recalled these planes later before they had completed their search. Although the information available as to why he recalled these planes is incomplete, it appears that his reason for doing so was his knowledge that none of the pilots of his search planes were night pilots.*

Commander Striking Force was now faced by a problem calling for the exercise of the highest order of ability. His Port Moresby Invasion Force

*Supplemental Report-TRUK-Naval and Naval Air Field Team No. 3, USSBS, P.28-C.

was in serious danger; his own ability to accomplish his protection objective was in serious jeopardy and he had recalled his search planes. He decided that the correct action would be to destroy the Allied carrier task force by a sundown attack. So, at about 1615, he launched 27 attack planes with pilots believed to be well qualified in night carrier operations. He wished to launch additional attack planes, but did not do so because his remaining pilots were not qualified in night carrier operations and he could not afford to lose them now.*

It was for these reasons, also, that he did not send out search planes in advance of the attack planes. It is possible that he caused some of the attack planes to fan out in a manner similar to the search plane doctrine. Certainly he made a bold decision when he launched them, and, if he used some of them for search, he might have been entitled to somewhat better fortune. However, if he launched them in a concentrated group and directed them to proceed along a general bearing line, as he appears to have done, he was entitled to misfortune. Night was coming on; his pilots were tired; the weather was worsening; and a battle was imminent. In such case, does it appear wise to send away from your command on an almost hopeless task, a large portion of your best trained pilots?

These attack planes completed their search during daylight without making contact and were, therefore, ordered to return to their carriers. It would be of interest to know what thoughts were passing through the mind of Commander Striking Force at this time, as he had been confident that the Allied carriers would be found in this sector, and he had failed to locate them there. Actually he still felt that they were close by and he wished his planes to return without further search, as he wanted their support in case he was attacked by Allied aircraft.

The weakness of his analysis in this case appears when it is realized that sunset was at about 1816, and the planes could not and did not arrive at the Japanese carriers on their return flight until long after darkness had fallen. They were not equipped as night fighters.

The Allied carriers were in the sector searched, but the Japanese pilots on the outbound flight had apparently passed them without seeing them. This appears to have been partially because of the weather, and partially because of a shortage of search-trained attack pilots. There is no comment about the weather in Japanese reports, although Allied sources refer to the haze, low ceiling, and passing squalls. Diagram F indicates that the Striking Force was in the bad weather area, which area

*Supplemental Report-TRUK-Naval and Naval Air Field Team No. 3, USSBS, P.28-C

extended for one hundred and more miles to the westward of the Striking Force and also indicates that the TF 17 was in this area.

Japanese attack groups were normally of little search value, in that they did not, as a general thing, conduct search operations of any magnitude when on an air attack mission. They followed about one hour behind the scouts to insure that an early attack on the target, once it had been located, would be made. This is an excellent method of operation and may pay large dividends if the position of the target is known with reasonable accuracy. In this case it appears that Commander Striking Force was correct in launching the air attack group, instead of the search planes, for reasons stated, provided some elements of the attack group were used for search. His failure to discover the enemy at an advantageous time was one of those misfortunes which often upset the plans of the most capable Commander.

Commander Striking Force was not lacking information very long. His attack planes, on their return flight to their carriers, were attacked by Allied carrier planes, apparently close to the outer limits of their flight, and nine were shot down. About one hour later, about three of his planes, which were evidently lost, circled the Allied carrier formation thinking that it was their own. They finally succeeded in returning to their own ships, and then informed Commander Striking Force that they had recognized two large enemy carriers about 40 or 60 miles away by noting the landing lights on their decks.*

The returning planes which were attacked by Allied carrier planes were directed by Commander Striking Force to drop their bombs into the sea in order to increase their maneuverability. Having accomplished this, the three planes which had discovered the Allied carriers were, therefore, unable to launch other than a strafing attack, which would have been of nuisance value only. It is well that the idea of kamikaze attacks was not as yet prevalent in the Japanese air forces, for it appears that it would not have been difficult to have made a successful suicide attack on the Allied carriers. There was, apparently, some doubt initially within these carriers as to whether the Japanese planes were friend or foe, and darkness was rapidly falling.

Since neither the Japanese carriers nor planes had radar and since there were no homing devices, it became necessary for the Japanese pilots to locate their Striking Force by their own wits. As they appeared to encounter considerable difficulty in this regard, partially, apparently,

*Supplemental Report-TRUK-Naval & Naval Air Field Team No. 3, P.28-C.

because of the weather, Commander Striking Force found it necessary to assist them by turning on his searchlights. This was a courageous decision, and Commander Striking Force was not at all happy in being forced to make it, as he did not want the Allies to know his position. However, he had no choice, for, if he had not shown his searchlights to guide his pilots home, he would not have had sufficient planes left to attack the next day. Despite this employment of searchlights, he did not succeed in completing his landing operations until after 2300.* When his planes had finally landed he found that he had lost 9 in combat and 11 operationally. This would suggest that the Japanese were not adequately trained in night carrier operations unless the planes, in searching for their carriers, ran out of fuel and crashed in the sea.

When the pilots reported to Commander Striking Force that the Allied carriers appeared to be 40 to 60 miles away, a discussion arose on board the ZUIKAKU as to the advisability of making a night attack. The Staff Operations Officer was anxious to make this attack, but after an estimate of the situation it was decided, in view of a lack of information concerning Allied carrier task force surface ship strength, not to attack until morning.** This appears to have been a wise decision for the surface ship strength of the Striking Force was only 2 heavy cruisers and 6 destroyers. Some of these were required during the night for anti-submarine screen work, as well as for defense, in case of an Allied night attack, which, while not mentioned in the Japanese accounts, was a strong Allied capability, as previous discussion has shown. Actually, the Japanese and Allied forces were not 40-60 miles away but were, instead, about 95 miles away.

Meanwhile, the Commander of the Port Moresby Invasion Force requested him to close that force in order to provide better protection. This he agreed to do, because his objective was the protection of the Invasion Force. His desire to obtain a better position inclined him to "run North then East and then South, feeling certain that your carriers would strike in the direction of the transports the next morning, and by following a semi-circular track from North, through East to South I would not be in their line of attack. Furthermore, I would gain the advantage of being on their flank where I could launch strikes from the East. If I had done this, I feel that we may not have had either carrier of the 5th Air Squadron damaged. But I had my basic mission to fulfill, which was to protect the transports."*** But was he correct in this reasoning? Were not the Allies cognizant of his presence within a limited number of miles, because of the fact that his planes had endeavored to land on the Allied carriers?

*Supplemental Report-TRUK-Naval & Naval Air Field Team #3, USSBS, P.28-C.

**Interrogation of Captain Yamaoka, I.J.N. Operations Officer, Staff 5th Air Flotilla. USSBS Naval Analysis Division Interrogation of Japanese officials. Volume I-Interrogation Nav. No. 10.

***Supplemental Report-TRUK-Naval & Naval Air Field Team #3, p.35, 36.

Was it not a capability of the Allies to expect an attack from him and, therefore, to search for the Striking Force in preference to the Invasion units which even then were retiring to the northward? Did he not, therefore, become temporarily the correct physical objective of the Allied carriers, now that his nearby presence was known and jeopardized the Allied plan, which was apparently to destroy the Port Moresby Invasion Force? As a matter of fact, the Allies launched a 360° search at dawn May 8th to locate the Striking Force.

Shortly after sunset on the 7th, the Striking Force changed course to approximately 335° (T). When the planes commenced returning about 1945, course was changed to the southeast in order to head into the wind. After the planes had been landed about 2200, course was changed to the north and at 2400 the Striking Force was in Lat. 12°-40' S., Long. 156°-45' E.

OPERATIONS OF JAPANESE COVERING FORCE, May 7th

To go back some hours, the Covering Force continued on a westsouth-westerly course, until 0700 May 7th, when it headed into the wind to launch 4 reconnaissance seaplanes from the KINUGASA, FURUTAKA, KAKO and one from the SHOHO. The wind at this time was east-south-east about 8 knots, sea calm, visibility good.

This search appears to have been directed by Commander 4th Fleet and was to cover the area between 090° from ROSSEL Island and 230° from DEBOYNE Island to a distance of from 150 to 250 miles.

At 0730 the SHOHO launched 4 carrier fighters and 1 carrier attack plane as aerial cover for a convoy of the Port Moresby Invasion Force, which she had been directed to escort.

Between 0750 and 0830 a number of Allied carrier attack planes were reported by the units of the Covering Force, most of them passing to the northwestward. As from all of the information available the Allied Carrier Task Force was to the south; the fact that the planes were returning to the northwest and the increased number of planes indicated to Commander Covering Force that the Allied forces were nearer than he had estimated. Apparently, at this time Commander Covering Force also conducted searches in the vicinity of MURUA Island.

At 0830 the Commander Covering Force informed his task force that the Allied task force was bearing 160° (T), distant 140 miles from DEBOYNE. The SHOHO states that she immediately prepared to make a torpedo attack with

carrier aircraft.* At 0838 FURUTAKA plane reported Allied task force at 0820 was bearing 152°, 150 miles from DEBOYNE. At 0840 KINUGASA plane reported Allied task force at 0830 as 170°, 82 miles from ROSSEL Island and that the enemy force consisted of 1 BB, 2 CA, 7 DD and 1 CV. The plots of these latter two reports do not agree by about 45 miles. Apparently these reports refer to the two Allied forces in the area, and are not reports of the same force. The western position was probably on the Support Group which was heading to cut off any Japanese forces which might pass through JOMARD Passage but it was considerably in error (about 38 miles). The eastern contact was probably on TF 17. The center contact was probably on the Support Force. This report was reasonably accurate (within 15 miles). Meanwhile, the Striking Force reported another Allied carrier task force as 195°, 450 miles from TULAGI. This proved to be the NEOSHO and SIMS, but this fact was not received by Commander 4th Fleet or his various task groups, such as the Covering Force, until later. At 0900 the Port Moresby Invasion Force was directed by Commander 4th Fleet to retire to the west, and, later, to the northwest. At 0930 Commander Covering Force determined that these were two Allied task forces southeast of DEBOYNE. Although there is no comment from Commander Covering Force it is assumed that this opinion was reported to Commander 4th Fleet. What the reactions were of Commander 4th Fleet, upon being informed that there were three Allied single carrier task groups in the area, each apparently supported by at least one battleship with the usual cruisers and destroyers, is not known. However, he was in a difficult position. He had three carriers, two of them first line, but the Allies, apparently, had three carriers, all first line, supported by strong naval power. Certainly he could not go ahead with the PORT MORESBY operation until he had gained at least local command of the area. It, therefore, appears that, as a result of his analysis of the situation, he re-affirmed his decision to retire the Port Moresby Invasion Force. He, apparently, determined that his new tasks were to destroy or drive off the Allied task forces and to delay his present operation until he had gained at least local command of the area.

At 1008 KINUGASA reconnaissance planes reported that an Allied carrier was launching planes. Commander Covering Force states that, "the SHOHO was immediately ordered to launch all of her planes but that since she was, at the time, busy recovering planes already up and refueling the planes which had been carrying out aerial security she was not able to comply." Why this should have been so, is not clear, for she had only 4 fighters and 1 attack plane in the air at the time. No other planes had been launched since the preceding day. At 1030 she launched 3 additional fighters and recovered the 4 fighters and 1 attack plane. She did not launch any other

*SHOHO Action Report #7 of #6 dated May 1942, WDC #160465.

planes until she was actually under attack, when at 1117 she launched 3 more fighters. Her complement was about 21 planes, 12 VF (ZEROES) and 9-12 VT, all of which would be required for action. Actually, one hour elapsed before the Allied planes started their attack. Why all planes were not launched in this hour is obscure.

Commander Covering Force directed that all cruiser planes track Allied task forces. At 1100, he received word that the Allied task force, reported 420 miles south of TULAGI, was not a carrier force at all but was, instead, one oiler and one destroyer, which had been destroyed.

About this time, planes from the KINUGASA and FURUTAKA, which had been tracking the Allied task forces southeast of DEBOYNE, reported that these task forces were in two groups composed of a total of 2 CV, 2 BB, 2 CA, 2 CL and 7 DD. From this it should be apparent that the pilots of the cruiser planes were well trained and courageous, for their tracking reports were generally reasonably accurate and they were always subject to destruction by Allied carrier fighters. There were, of course, two Allied carriers, but there were no battleships.

Meanwhile, the SHOHO had commenced launching planes and soon had launched 3 planes. She and the SAZANAMI, apparently, were not operating in close formation with CruDiv 6 and had not been doing so since about midnight. Why the Japanese permitted this condition to obtain is not known. There was no apparent reason why all planes could not have been launched from both the cruisers and the carriers while in close formation and, therefore, it appears that it would have been wiser had Commander Covering Force combined his ships into a close anti-aircraft disposition in order to withstand the expected air attack. His failure to do so appears to have contributed materially to the loss of the SHOHO.

At 1050 15 Allied planes were noted coming in to attack the SHOHO. The Covering Force was, at this time, in a very loose disposition with the four cruisers in what appeared to be 90° sectors and at a distance from the SHOHO, reported by Allied pilots, to be about 8000 yards. The SAZANAMI was evidently near the SHOHO as a plane guard. The Japanese formation was loose and does not appear to have used a standard anti-aircraft formation, if the formations employed the next day in the aircraft action between the carriers is a criterion. At 1107 the SHOHO commenced maneuvering and firing at these planes, which were attacking in groups. Three enemy planes attacked at about this time and made a near miss. The SHOHO reported that one of these planes had been shot down. These 3 planes were followed by 10 dive bombers which also made near misses. The SHOHO had been unable to launch all of her planes as directed, so upon completion of the second attack she launched more fighters. At 1117, while launching these fighters, she reported that she was under at-

[REDACTED]

tack by an Allied carrier plane force consisting of about 60 planes, of which about 20 were bombers, 20 torpedo planes, and 20 were fighters. The launching was discontinued after 3 planes had been launched, and the SHOHO then maneuvered to avoid this attack. At 1120 her flight deck elevator was hit by two bombs, and her starboard quarter was hit by a torpedo. She went out of control and burst into flames in several places. Meanwhile, the enemy continued to attack and, although the SHOHO fought back, by 1130 she had received 13 bomb hits and 7 torpedo hits.* All hands were ordered to abandon ship at 1131. But, true to Japanese tradition, most of the crew did not leave and went down with her at 1135. The Japanese lost on the SHOHO about 15 planes, and of the 6 in the air, 3 were lost. The remaining 3 made emergency landings at DEBOYNE.

The Allied attack appears to have been directed solely against the SHOHO and, therefore, Crudiv 6 and the SAZANAMI escaped damage.

During this attack the four cruisers of Crudiv 6 did not close the SHOHO to increase her defense but rather circled where they were and, by so doing, tended to draw away from her. This left large gaps in the already loose cruiser screen, and it was through these gaps that many of the attacking planes came. The gunfire of Crudiv 6 and the SHOHO was reportedly desultory, sporadic, insufficient in volume, fairly accurate in fuse setting, but lagging in deflection. It was, therefore, ineffective.**

The Covering Force now withdrew to the northeast in order to avoid, if possible, being attacked by another wave of planes from TF 17. This retirement appears to have been the correct decision for Commander Covering Force as he was now without air cover and was an excellent target for Allied aircraft. He apparently felt that, by proceeding to the northeast, he was interposing between the transports, which were retiring to the north, and TF 17.

Commander 4th Fleet, about this time, decided to detach certain combatant units from the forces escorting the Port Moresby Invasion Force and to return the remaining ships of all types to the RABAU area for safety. He, therefore, detached Minelayer Division 18 and Destroyer Division 6, and ordered them to consolidate with Crudiv 6. As no further record appears of the Minelaying Division, it is assumed that Commander 4th Fleet cancelled her orders and that she continued to retire with the Port Moresby Invasion Force.

Meanwhile, the planes of Crudiv 6 were directed, upon completing their searches, to retire to DEBOYNE and base there. Based at DEBOYNE

*Interrogations of Japanese Officials, USSBS (Pacific) Vol. II, P. 459.

**Action Report Bombing Squadron Two, Serial 001, May 14, 1942, also Action Report Scouting Squadron Two, May 7, 1942.

also, were many reconnaissance seaplanes which were being tended by the seaplane tenders KAMIKAWA MARU and HIJIRIKAWA MARU. These seaplanes, in cooperation with the planes of the 25th Air Flotilla, and with those of Crudiv 6, were employed in tracking the Allied surface forces.

At 1330 Commander 4th Fleet, who had been supervising his planned action from RABAU, and who was evidently, maintaining a running estimate of the situation, ordered Crudiv 6 and Desron 6 to make a night attack on the Allied task forces. There is no information as to which task force was to be attacked, but that could well have been left to the decision of Comcrudiv 6. Why Commander 4th Fleet ordered this attack is not apparent, but it would indicate that either his information was poor or his estimate was incorrect. For, at the time he issued the order to Comcrudiv 6, the nearest Allied task force (TF 17) was 180 miles away. He would have had to launch his attack after nightfall, in order that its objective might not be known by the Allies and in order that his surface forces might not be subject to Allied air attack. Does it not appear, therefore, that such a night attack by Crudiv 6 and Desron 6 was infeasible? It will be shown later that Commander 4th Fleet finally arrived at the same conclusion.

At 1415 SAZANAMI was directed to proceed to the position where the SHOHO had been sunk and pick up survivors. SAZANAMI left Crudiv 6 and proceeded on her mission. The Covering Force now consisted of Crudiv 6 only. It will hereafter be referred to as Crudiv 6.

Up to this time the location of the Allied task forces was not clear to Comcrudiv 6. As a matter of fact, he had been informed that the position of the enemy was at 1400 about 360 miles away. A report of this nature is valueless as it does not indicate the bearing, the distance or even the composition of the Allied task force reported.

During the early afternoon Japanese tracking planes from DEBOYNE and RABAU reported that the Allied naval forces were in two groups; one a carrier group; the other a battleship group. At 1510 Comcrudiv 6 received a report that bombers of 25th Air Flotilla had attacked the battleship group and had sunk 1 battleship and heavily damaged 1 heavy cruiser. At 1420, he received an additional report that an additional battleship had been slightly damaged.* In this case there were no Allied battleships in the area and there were no ships of any type damaged or sunk. The difficulties of Commander 4th Fleet in maintaining a correct running estimate under the above conditions must have been exceptional.

At about 1630 the tracking planes reported that part of the enemy had changed course to the south to 200° (T) and that the remaining part had changed course to 160° (T). Commander 4th Fleet apparently decided from

*Combat Report No. 7, CruDiv 6 dated 17 July 1942, WDC #160997, P.8.

this that the damaged Allied ships would attempt to escape to the TOWN-SVILLE area. He, therefore, ordered the Submarines en route to TOWNNSVILLE to change their line of deployment to the region north of TOWNNSVILLE. This appears to have been a correct decision. The Allied Support Force, which had just been attacked, did head in a southerly direction and by 1200, May 9th, was just south of Lat. 15° S. which was about half way to TOWNNSVILLE.

At 1700, Crudiv 6 changed course to the south and proceeded to the evening rendezvous with Desron 6 which had been set for 0200, May 8th at a position 20 miles east of ROSSEL Island.

At 1630, an AOBA plane reported a battleship task group of 1 BB, 2 CA and 3 DD bearing 200° (T), 130 miles from DEBOYNE on course 200° (T), speed 16 knots. At 1711, planes from 25th Air Flotilla reported as enemy force as bearing 245°, 185 miles from ROSSEL Island, on course 180°. These reports were approximately correct as regards location and speed. The second report was 30° off in course, 180° estimated, vs 150 actual; they were correct in the number and type of ships in the force being trailed, with the exception that there were no battleships. What were being mistaken for battleships is not known but appear to have been the CHICAGO class.

At this time, airplanes from the Striking Force reported in plain language that they had been in action with enemy carrier based fighters and had received serious damage. The fact that the Japanese stress that this report was in plain language indicates that Japanese practice was to code such reports. This is wise, as information of damage to own forces can be of inestimable value to the enemy and should be denied them as long as possible.

At 1845 planes from the Striking Force reported an enemy carrier task group as bearing 160°, 111 miles from ROSSEL Island on course 230° (T). This position was apparently 25 miles due east from actual TF 17 1845 position. This report was apparently made by one of the attack planes from the Striking Force and indicates again that the navigational tracking ability of the Japanese attack plane pilots was only fair and was below the average of the Japanese scouting plane pilots. The Japanese realized that this enemy carrier task group was a different one from that reported by 25th Air Flotilla.

At about 1920 reports were received that the weather in the area of action was becoming increasingly bad and that the shore and tender based tracking planes had returned to their bases. Thus from this time onward during the night, the Japanese commanders were uninformed as to the movements of the two Allied task forces. They realized that air reconnaissance was at an end, and that any further reconnaissance must necessarily be by surface craft.

Comcrudiv 6, not receiving any orders from Commander 4th Fleet, and not receiving any further information concerning the Allied task forces, decided to continue on southerly courses to the 0200 rendezvous with Desdiv 6. This

appears to have been the correct decision, although it was apparent to Comcrudiv 6 that the Allied carrier task group was, from his plots, about 200 miles away. He was in communication with his immediate superior in command, who had more information and better facilities than he did for plotting them, and that immediate superior had not cancelled his orders. He was apparently not entirely familiar with his immediate superior's plans, but he did know that, in view of the bad weather, he had been ordered to make a night attack, and surface tracking the enemy was necessary. He knew that if he found it advisable to discontinue the plan to rendezvous with Desdiv 6, or to make a night attack, he would be expected to make adequate representations thereon to his immediate superior. This was American practice; it is assumed that it was also Japanese practice. He further knew that should he be forced to radio silence, he would then be expected to act according to the dictates of his own conscience guided by the known views of his superior. In this case, in view of the fact that there was apparently no necessity for radio silence, in that all of the Japanese forces in the DEBOYNE area had apparently been located by the Allied carriers, he knew that should he desire to make a change in plans he should communicate with Commander 4th Fleet. The fact that he did not do so under the conditions existing indicates a correct adherence to the basic plan. He apparently felt confident that if Commander 4th Fleet, with all of the facts before him, still desired him to attack, the attack must be a calculated risk.

At 2130 SAZANAMI reported that she had arrived at the site of the sinking of the SHOHO at 1730, and had continued rescuing survivors until sunset. She reported having recovered 100 men, including the executive officer.

At 2300 Commander 4th Fleet cancelled by despatch plans for night action; delayed the Port Moresby Invasion date by two days; and directed the second section of Crudiv 6 to join the Striking Force. This indicates that Commander 4th Fleet was following the developing action with care. He apparently considered it inadvisable, under the conditions, to make a night attack, as its chance of being successful was poor; he apparently thought it unwise to continue the PORT MORESBY operation until local command of the area had been gained; and he apparently considered it highly important that the anti-aircraft strength of the Striking Force be augmented in order that the force's ability to withstand Allied carrier air attacks might be considerably increased. This is in contrast to CTF 17's decision to detach the Support Force and, thereby decrease considerably the AA defenses of his task force in the face of imminent action.

At 2315 the second section of Crudiv 6 was detached to join with the Striking Force. The first section proceeded so as to be available to

assist in the invasion of PORT MORESBY on X plus 2 day. It fueled at sea en route, and was directed after fueling to join the Port Moresby Invasion Force, and proceed to a rendezvous 225° (T), distant 100 miles from SHORTLAND Island.

At 2400 May 7th first section CruDiv 6 was at Lat. 10°-15' S., Long. 154°-15' E. and the second section was at Lat. 10°-30' S., Long. 154°-28' E.*

The Support Force continued retiring on a northwesterly course until about 0800 when it changed course to the northeast. At 2400 it was in an estimated position at Lat. 7°-52' S., Long. 152°-38' E., heading towards SHORTLAND Island.*

Desron 6 proceeded to the northeastward toward SHORTLAND Island and at 2400 was in an estimated position 195 miles bearing 207° from SHORTLAND.*

The Port Moresby Invasion Force continued retiring to the northeastward generally towards BUKA until shortly before 2400, when it headed up to the northwestward towards RABAU. At 2400 its estimated position was 250 miles bearing 165° from RABAU.*

OPERATIONS OF 25th AIR FLOTILLA AND ATTACK ON SUPPORT GROUP

Throughout May 7th the 25th Air Flotilla continued the reconnaissance missions which had been assigned, and made some of the frequent contact reports, previously indicated.

At 0950 an attack group of torpedo bombers and Zero fighters took off to attack an Allied task force which had been reported by the search seaplanes of CruDiv 6. In addition, the air attack group which was composed of type 96 land attack bombers and which was to attack PORT MORESBY, was diverted from that attack to assist in attacking the Allied task force. It took off on this mission at 1100. Meanwhile, the torpedo attack group had difficulty in locating the Allied task force and searched the reported area for about one hour. Finally the enemy was reported to be in a position bearing 212°, 190 miles from DEBOYNE. At 1450, the torpedo plane attack group reported attacking enemy battleships. At 1444, the type 96 bombers reported attacking the above battleships. The composite damage reported inflicted consisted of one California class battleship, and one Augusta class heavy cruiser sunk; one Warspite class battleship received two torpedo hits and suffered extensive damage. A Canberra class cruiser was reported as having been attacked with torpedoes with damage unknown.** The identification, in this attack, appears to have been very poor, and the destruction claims were fantastic. Cruiser identification was only fair. Of the 12

*Track Chart "Battle of the Coral Sea" prepared by Lieut. Comdr. Henry Salomon, Jr. USNR, in cooperation with G-2 SCAP, TOKYO, JAPAN. Japanese track chart work done by several Japanese officers headed by ex-Rear Admiral Tomioka, IJN at Naval War College, Tokyo.

**Detailed Battle Report No. 11 of the 24th Air Flotilla, WDC No. 141142, Group No. 23, Item No. B23-D. P.6.

torpedo attack planes which took part in this attack, four were lost. One made a forced landing with heavy damage and five suffered bullet damage. Of the type 96 bombers, none were reported lost but three reported bullet damage.

At 1700, planes of 25th Air Flotilla reported an Allied task group of 1 CV, 1 CA, 2 CL, 4 DD in position 241° T., 170 miles from ROSSEL Island, but, owing to poor visibility, were unable to track it.

During this time this Air Flotilla was also engaged in attacking PORT MORESBY. However, the attack group consisted of but 4 fighters because the attack planes were being used in the CORAL SEA.

THE MAIN CARRIER ACTION
2400 May 7th to 2400 May 11th

Forces Engaged

(a) Task Force 17

YORKTOWN (FF) (CV), LEXINGTON (F) (CV), ASTORIA (CA), PORTLAND (CA),
CHESTER (CA), MINNEAPOLIS (CA), NEW ORLEANS (CA), HAMMANN (DD),
RUSSELL (DD), AYLWIN (DD), PHELPS (DD), DEWEY (DD), MORRIS (DD),
ANDERSON (DD).

Total 2 CV, 5 CA, 7 DD.

Total planes available (121)	52 VF	55 VS	35 VB	21 VT
Planes launched for search		14 VS	4 VB	
Planes launched for attack	15 VF	11 VS	28 VB	21 VT
Planes launched for CAP	17 VF	17 VS		

(b) Striking Force

ZUIKAKU (F) (CV), SHOKAKU (CV), HAGURO (CA), MYOKO (CA), KINUGASA (CA),
FURUTAKA (CA), SHIGURE (DD), YUGURE (DD), ARIAKE (DD), SHIRAURO (DD),
USHIO (DD), AKEBONO (DD).

Total 2 CV, 4 CA, 6 DD.

Total planes available (122)	40 VF	39 VB	43 VT
Planes launched for search		10 VB	
Planes launched for attack	20 VF	29 VB	41 VT
Planes launched for CAP	20 VF approximate		

Actually, as will be shown later, Commander Striking Force's information on the composition of TF 17 was somewhat different than this, being 2 CV, 1 BB, 2 CA, and 5 DD, whereas CTF 17's information on the Striking Force was more nearly correct, being 2 CV, 4 CA, 3 to many DD. However, the net result, in evaluating strength and weakness factors, appears to have been about the same as with the actual forces. The analysis is, therefore, made on the actual forces.

The following survey of strength and weakness factors of each force, which might have seriously affected the final outcome of this action, has been made to indicate the material for testing the feasibility and acceptability of these courses of action, which may have been considered by each commander in solving his battle problem.

Task Force 17

Strength Factors

Greater number, CA (5 to 4)
Greater number, DD (7 to 6)
Greater number AA guns

(45 5"/38 plus 52 5"/25
vs 57 5"/50 plus 20
4"/7/45) *

Greater number AA machine
guns (124 1 1/2 plus 92 .50
caliber vs 16 2-pounder plus
62 machine guns, unknown ca-
liber).*

Recent victories at TULAGI
and against SHOKO had excellent
effect on morale. Radar and
homing devices.

Preponderance of dive bombers
(68 vs 39)

Weakness Factors

In clear weather area.
Owing to recent combining of TF
11 and TF 17, no tactical training
in maneuvering of single 2 carrier
task force.
Slow torpedo planes.

Striking Force

Strength Factors

Pilots had long combat
experience.
In bad weather area.
Higher velocity AA guns.
Preponderance of torpedo
planes (45 vs 21) and
fighters (40 vs 32)
Superior aerial torpedoes

Weakness Factors

Lack of success on previous day.
Lack of self-sealing tanks and
armor protection for plane crews.

Conclusions as to Relative Fighting Strength

The above analysis indicates that, insofar as anti-aircraft gun defenses, technological improvements with the exception of aerial torpedoes, numbers of dive bombers, and combat success are concerned, the advantage lay with TF 17; that insofar as visibility for attack and defense, combat training of pilots,

*Orange Fleet and Blue Fleet, Naval War College, 1941.

numbers of fighters and torpedo planes are concerned, the advantage lay with the Striking Force. All other advantages and disadvantages above listed while important, are not decisive, and may be considered to balance one another.

OPERATIONS OF TASK FORCE 17, May 8th

This battle reached its climax on May 8th, with the exchange of blows between the air attack groups of TF 17 and those of the Striking Force. The actual fighting time was extremely brief, being a matter of minutes in each case.

Task Force 17 continued to the south and westward during the night of the 7th-8th, and by 0800 of the 8th was in Lat. 14°-24' S. and Long. 154°-52' E. on course 125° (T). The MONAGHAN had been detached at 0055 on the 8th, to search the next morning for survivors of the NEOSHO and SIMS, and to send radio dispatches to CINCPAC and others. The departure of this destroyer further reduced TF 17 to five cruisers and seven destroyers as supporting ships for the LEXINGTON and YORKTOWN.

Thus, in a matter of 18 hours, CTF 17, with strong enemy forces nearby and with the probability of action imminent, had reduced his command by 3 cruisers and 4 destroyers.

The location of the SHOKAKU and the ZUIKAKU remained the principal concern of CTF 17. He had received intelligence reports during the night which indicated that the Port Moresby Invasion Force was retiring to the northward, but he had heard nothing specific about the two carriers of the Striking Force. Aircraft from these carriers had been seen about his own force the previous night, but the carriers themselves had not been sighted. Radio intelligence indicated, however, that these carriers might be either east or west of Task Force 17. He assumed that they had remained in the CORAL SEA to settle the problem of air control preliminary to the renewal of the advance of the Port Moresby Invasion Force.*

Because the whereabouts of the enemy carriers was doubtful, CTF 17 decided upon the recommendation of CTG 17.5, Commander Air, to conduct a 360° dawn search. The LEXINGTON was directed to conduct this search to a radius of 200 miles in the northern semi-circle and 150 miles in the southern semi-circle. In compliance with this directive, the LEXINGTON, at 0625, launched 14 VS's of Scouting Squadron Two and 4 VB's of Bombing Squadron Two.

At 0805, the LEXINGTON made a radar contact on an unidentified plane bearing 328° (T), distance 18 miles on a course of about 240° (T), at high speed and low altitude. Fighters were vectored out to intercept it,

*Action Report CTF 17, Serial 0782, dated May 27, 1942, Page 7 & 8.

CROSS SECTION OF THE ATMOSPHERE, 1100 (-11) 8 MAY 1942



TASK FORCE 17

JAP STRIKING FORCE

THROUGHOUT THE DAY, TASK FORCE 17 OPERATED IN AN AREA OF CLEAR WEATHER. DUE TO THE UNLIMITED CEILING AND EXCELLENT VISIBILITY, THE JAPANESE WERE ABLE TO LOCATE AND ATTACK THE CARRIERS WITH THE RESULT THAT THE LEXINGTON WAS LOST AND THE YORKTOWN DAMAGED. AT THE SAME TIME THE JAPANESE FORCE WAS IN AN AREA OF WIDESPREAD CLOUD COVER, SCATTERED SHOWERS AND RAIN SQUALLS. THE UNFAVORABLE WEATHER FURNISHED EXCELLENT CONCEALMENT AND PRESENTED A SERIOUS HANDICAP TO OUR AIRCRAFT.

AWA-18-47

PLATE III

but were unsuccessful. This contact disappeared from the screen at 0816. However, TF 17 must have been thoroughly reconnoitered, for, at 0822, the LEXINGTON intercepted a Japanese radio transmission, giving the position, course, and speed of the task force.

During the night of 7-8 May, TF 17 in proceeding south, had left the protective cover of the frontal zone and had proceeded into a clear weather area. The weather which had aided this force the previous day, now was no longer helpful. For the ceiling and visibility were unlimited; the clouds were few and there were no rain squalls. The wind was blowing from the southeast with a velocity of 15 to 18 knots. These same conditions, with little change, held throughout the day in the vicinity of TF 17. On the other hand, the Japanese Striking Force was now operating in the same frontal zone, that had shielded the Allied carrier task force the day before. In the vicinity of the Japanese carriers, the visibility varied from 2 to 15 miles. Cumulus, altocumulus, and cirrus clouds covered the area. Intermittent local rain squalls impaired flying conditions still further.*

Tacticians will probably wonder what the governing considerations were which caused CTF 17 to abandon the poor visibility areas which had been so helpful to him at TULAGI and in action against the SHOKO. For by so doing he was giving the enemy an advantage of first importance. The area of bad weather was only 50 miles to the north. The question necessarily arises as to whether the advantages of weather were fully appreciated at the time. Certainly the Japanese reports studied do not indicate that the decisions of the Commander Striking Force had been seriously, if at all, affected by weather considerations. His choice of position for the battle on May 8th appears to have been based on other factors and the fact that he had weather cover appears to have been fortuitous.

At 0815, a LEXINGTON scout 2-S-2 made contact with an enemy force and reported at 0820, "Contact 2 CV, 4 CA, 3 DD." Eighteen minutes later, at 0838, he amplified this contact as "2 CV, 4 CA, many DD's bearing 006, distance 120 from Point ZED, course 120, speed 12." The coordinates for Point ZED were Lat. 14°-00' S., Long. 156°-00' E., which placed this contact in Lat. 12°-00' S., Long. 156°-12' E. As plotted and signaled by Commander Air, the enemy bore 028° (T), 175 miles from TF 17.

The LEXINGTON scout 2-S-1, who was Commander Scouting Squadron Two, was in the adjoining sector. He intercepted this contact report, but, in view of his own distance from TF 17, he was doubtful of the reported distances of the contact from Point ZED. He endeavored to contact 2-S-2 by radio but, failing, turned, at about 0830, to verify the contact.**

*The Battle of the CORAL SEA, Aerology Section, Office of Chief of Naval Operations, April 1944, P.14.

**Report of Action-Scouting Squadron Two, USS LEXINGTON, May 8, 1942, Page 1.

He sighted the enemy force at 0830 and reported 2 CV, 2 DD bearing 000° (T), distance 160 miles from Point ZED, course 180°(T), speed 25. This contact placed the enemy approximately 25 miles to the northeast of the 0815 initial contact and about 45 miles north of the enemy 0900 predicted position. This discrepancy as will be seen later, may have contributed to the difficulty experienced by the LEXINGTON Air Group in finding the Japanese Task Force, which resulted in one whole squadron of dive bombers being forced to return to the LEXINGTON without attacking or even seeing the enemy. Scout 2-3-1 maintained contact with the Japanese carriers until 1045, when he was forced to return due to fuel shortage.

This verification of contact by Commander Scouting Squadron Two is an excellent example of the use of mental power in war. He had reduced the limit of his search and had covered considerable distance of his return leg, so that by leaving his station, he was not leaving much, if any, of his area unsearched, and he was placing the weight of his experience at a most vital time, at the disposal of CTF 17.

At 0838 upon receipt of information of the position of the enemy, CTG 17.5 Commander Air directed both LEXINGTON and YORKTOWN to launch their air groups to attack the enemy carriers.

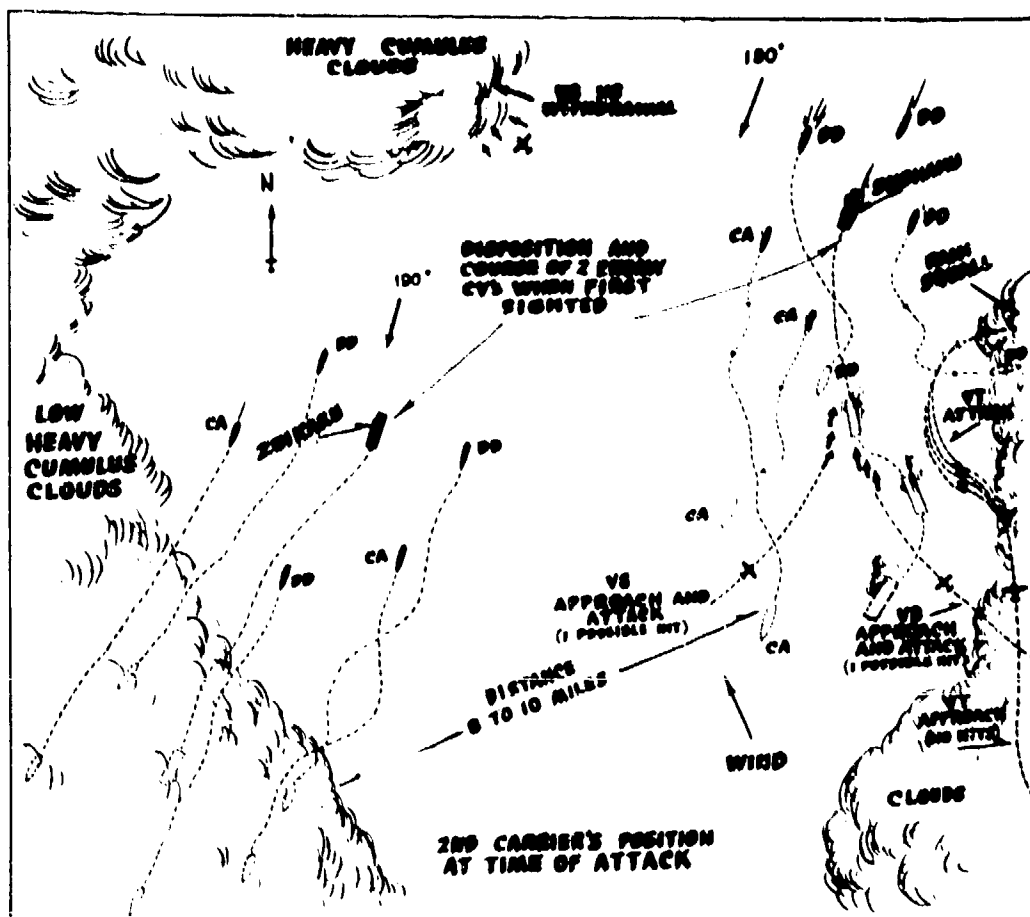
TF 17 turned over tactical command of the task force to CTG 17.5 at 0907 in order to reduce signaling between carriers and to allow him complete freedom of action for his carriers and air groups.*

The air attack groups had already commenced taking off. The first planes left YORKTOWN at 0900 and the last plane left the LEXINGTON at 0925. All scouts and bombers were armed with one 1000 pound general purpose bomb and each torpedo plane carried one torpedo. The fighters were armed with machine guns only.

The YORKTOWN Air Group was the first to take departure. It consisted of 7 VS of Scouting Squadron Five, 17 VB of Bombing Squadron Five, and 6 VF of Fighting Squadron Forty-Two, and 9 VT of Torpedo Squadron Five. The scouting planes and bombing planes escorted by 2 fighters, proceeded toward the contact, climbing to 17,000 feet. The two fighters lost contact with their VS while en route and did not arrive at the target area until these planes had completed their attacks. The torpedo planes, with four escorting fighters, proceeded to the objective at low altitude.

Bombing Squadron Five sighted the enemy first at about 1032. As first seen, the enemy disposition consisted of 2 CV which appeared to be 8 to 10 miles apart, escorted by a total of 1 BB or very large CA, 3 CA and 4 CL or DD, all on course 190°(T), speed 20 knots. The disposition

*CTF 17 Action Report-Battle of the Coral Sea-Serial 0782 dated 27 May 1942, Para. 21, page 8.



SCHEMATIC DIAGRAM OF YORKTOWN ATTACK
8 MAY. LOCATION OF CRUISERS AND
DESTROYERS GENERALLY AS REPORTED
BY THE YORKTOWN.

PLATE II

The weather was unsettled, with some rain squalls and a broken layer of clouds at 2000 to 3000 feet.

At 1000 CTF 17 notified ComSoWesPac that the enemy Striking Force had been located and gave its disposition and its position at 0800, as well as the position of TF 17. CTF 17 stated later that he had hoped that ComSoWesPac would be able to bomb and track the Striking Force.* No attack materialized.

By 1049 the scouts and bombers were in position to attack, but circled to wait for the slower torpedo planes. One carrier, later shown to be the ZUIKAKU, disappeared into a rain squall; the other carrier, now known to have been the SHOKAKU, turned into the wind and commenced launching planes. At 1057 Commander Torpedo Squadron Five informed Commander Scouting Squadron Five that he was starting his attack. A coordinated attack was begun on the SHOKAKU. Torpedoes were launched from an altitude of about 50 feet and at a distance of between 1000 and 2000 yards from the enemy carrier.

A total of three torpedo hits, six direct bomb hits, and many near misses were claimed by the YORKTOWN Air Group. Pictures of the action show the carrier to be ablaze in the bow and also show a fire aft. Torpedo plane pilots from the YORKTOWN Air Group reported that the first three torpedoes hit between the port bow and the amidship section, and that the whole port side of the carrier from the bow aft for 50 or 100 feet was afire. Another small fire was observed on the starboard quarter by the pilots. When the carrier was last seen, about 15 minutes after the attack, the pilots reported that the fires were still burning fiercely.

The dive bombers were attacked by enemy fighters during their dive and pull-out. In the ensuing action, Scouting Squadron Five and Bombing Squadron Five each reported shooting down four fighters. The four fighters escorting the YORKTOWN torpedo planes, drove off an attack by six Zeroes during the approach, which allowed the VT's to complete their approach and drops unmolested. It is estimated that the Japanese had a combat air patrol of about twenty fighters in the air over their carriers. Three enemy fighters and one enemy scout plane were shot down by this escort during the attack. The use of convenient cloud cover by the YORKTOWN planes while rendezvousing and retiring, was a major factor in keeping their losses to a minimum. Two SBF's were shot down in the vicinity of the enemy, one did not return, and one was landed in the water near the YORKTOWN due to damaged landing gear.

*CTF 17 Action Report - Battle of the Coral Sea-Serial 0762 dated 27 May 1942, p.8, Para. 21.

The LEXINGTON attack group took its departure at about 0925 or ten minutes after the YORKTOWN Group. At that time, it consisted of the LEXINGTON Air Group Commander with 4 VS and 18 VB's of Bombing Squadron Two, 12 VT's of Torpedo Squadron Two, and 9 VF's of Fighting Squadron Two. Two fighters were assigned as escorts for the Air Group Commander, 3 for Bombing Squadron Two and 4 for Torpedo Squadron Two.

The original plan for the flight to the target called for the dive bombers to gain altitude gradually on the way in climbing to 18,000 feet, the torpedo planes to stay at moderate altitude, 8000 feet, and the Air Group Commander to maintain visual liaison with the other two elements of his group. As they approached the target area, an overcast extending from 1,000 feet to 15,000 feet was encountered and Bombing Squadron Two lost visual contact with the rest of the attack group. It descended to a lower altitude but was still unable to find its Group Commander and the torpedo planes. The fighter escort for the dive bombers became separated from the dive bombers during this same period and, due to the lack of adequate navigational information and a shortage of fuel, was obliged to return to the LEXINGTON.

Radio transmissions indicated that Torpedo Squadron Two, having reached the geographical position of the reported contact, had made no contact and that the Air Group Commander had directed the squadron to fly a "box" in an effort to locate the objective. Bombing Squadron Two was maneuvered in a similar manner but, unlike the torpedo planes, was not successful in locating its target. The volume of radio traffic indicated that it was in the vicinity of the target. However, after the torpedo planes had made their attack and Bombing Squadron Two had still failed to locate the target, Commander of Bombing Squadron Two decided that, in view of the fuel remaining, his planes would have to depart without attacking, if they were to successfully return to the LEXINGTON. He, therefore, set their course for the return flight and the squadron landed aboard the LEXINGTON at 1520, having jettisoned its bombs en route to save fuel. Due to an oversight in fueling, this squadron had taken off from the LEXINGTON with only 220 gallons of gasoline instead of the capacity load of 250 gallons. The Squadron Commander had noted this discrepancy, prior to the flight, and had protested to the Air Officer. He was informed, however, that due to the urgency of the situation, there was not sufficient time to fuel the planes to capacity as they wanted to get both groups off together.

As has been previously pointed out, the remainder of the LEXINGTON attack group, after reaching the end of its navigational leg without sighting the enemy, began flying a "box". The group at this time consisted of 11 torpedo planes,

plus 4 scout bombers, which comprised a section led by the LEXINGTON Air Group Commander, plus an air escort of 8 fighters. One torpedo plane had been forced to turn back due to engine trouble. After flying about 8 minutes on the first leg of the box, which was 90° to the left of the search track, Commander Air Group Two sighted the enemy, consisting of 1 CV and two cruisers, broad on the port bow in the vicinity of rain squalls, and just passing under a large cloud on a course of about 220° (T). The approach was made over this cloud at about 6000 feet.

The torpedo attack was launched through a hole in this cloud in a spiralling glide. When the torpedo planes emerged from the clouds, the enemy carrier was directly ahead about 2 miles. Five torpedo hits were claimed as the result of this attack.

The Air Group Commander, with his section of 4 VS, accompanied the torpedo planes during their approach and timed his attack to obtain a coordinated effort. His section claimed two bomb hits on the same carrier that was attacked by the torpedo planes.

As the attack group approached the carrier, it was intercepted by Japanese fighters who endeavored to break up the attack. Only two of the fighters escorting the LEXINGTON Air Group survived this engagement. These fighters because of the superior number of the opposing Japanese combat air patrol were eventually obliged to seek cloud cover. They were, however, able to engage the attention of the Japanese fighters for sufficient time to enable the torpedo and bombing planes to get their attacks home with relatively no air opposition.

Enemy fighters, anti-aircraft fire, and fuel shortage accounted for 3 VS, 1 VT and 1 VF in the LEXINGTON Attack Group. Two enemy fighters were shot down in the target area by the LEXINGTON escort fighters and two more enemy fighters were splashed by the torpedo planes, when they were attacked on their return flight to the LEXINGTON.

The time of attack by the LEXINGTON Air Group is not definitely established but considered evaluation of the action reports of the squadrons involved tends to place it at about 1140. Japanese records indicate that the damage to the SHOKAKU occurred at 1140 when she received three bomb hits.* Whether all three of these bomb hits occurred at 1140 or whether some of them occurred prior to this time, is not clear.

Information from Japanese sources shows conclusively that the SHOKAKU was the only Japanese carrier damaged in the action of May 8th.* Further-

*Commander-in-Chief Combined Fleet Log-Coral Sea Action, May 8th, 1942, Interrogation of Captain Watanabe, IJN. United States Strategic Bombing Survey Naval Analysis Division, Page 539.

more, she was not hit by torpedoes but did receive a total of 3 direct bomb hits and 8 near misses, although the near misses appear to have had little, if any, effect. The torpedoes were apparently launched from too great a range. The Japanese stated that because of the slow torpedoes, and the long range from which they were launched, the torpedo attacks could be readily avoided.* One of the bomb hits was well forward on the port bow and set gasoline fires and destroyed the anchor windlass room. Another bomb hit was on the starboard quarter in the motor repair room. As a result of the first hit, the flight deck forward was badly damaged and the SHOKAKU was unable to launch planes, although it did land 4 planes after the attack, before the fires forward had been extinguished.* The fires seen by the YORKTOWN Air Group were, therefore, apparently caused by a bomb hit forward on the flight deck and by another aft on the starboard quarter.

It is difficult to assess the damage inflicted in this case by each of the Air Groups involved. It is entirely possible that the LEXINGTON Air Group attacked the ZUIKAKU which sustained no damage. One competent Japanese observer, who was in the ZUIKAKU at the time, states that she was attacked by bombers and torpedo planes but not hit.* If this were the case, then all the damage by the SHOKAKU must have occurred at about 1100 when she was attacked by the YORKTOWN Air Group, which does not correspond with the time of 1140 as given by the Japanese. 'Commander Striking Force stated, in his interrogations, that his flagship, the ZUIKAKU, had become separated from the SHOKAKU by about eight miles while the latter was launching planes; that the ZUIKAKU was in a squall at the time of the attack by TF 17 planes, and that the ZUIKAKU was not herself attacked.**

When the ZUIKAKU emerged from the squall, Commander Striking Force stated that he saw the SHOKAKU burning as the result of bomb hits. If all the damage to SHOKAKU was incurred at 1140 the LEXINGTON Air Group must have obtained 3 bomb hits. It will be remembered, however, that the YORKTOWN Air Group, which had attacked approximately 40 minutes before this time, had left a carrier with fires burning in her bow and starboard quarter. This suggests that some of the damage must have been incurred by the SHOKAKU prior to 1140. It, therefore, appears that the damage suffered by the SHOKAKU at 1140 must have been the result of the last bomb hit sustained, and that she must have been hit by 2 bombs from the YORKTOWN Air Group and by 1 bomb from the LEXINGTON Air Group.

It was, of course, realized that TF 17 would be subject to a counter air attack and preparations were therefore made to meet it.

*Interrogation of Captain Yamaoka, IJN-Operations Officer, Staff 5th Air Flotilla, USSBS, Naval Analysis Division Interrogation of Japanese officials. Vol. I-Interrogation Nav. No. 10, Page, 53.

**Supplemental Report-TRUK-Naval and Naval Air Team No. 3, USSBS, P.28-e.

Eight fighters for combat air patrol and eight SBD's for anti-torpedo plane patrol had been launched shortly after sunrise. In addition, as the attack developed, all available fighters and scout planes were launched until the combat air patrol and anti-torpedo plane patrol consisted of 17 VF and 23 SBD respectively. These SBD's were employed because there were not sufficient fighters to provide the security required. The LEXINGTON was designated as Fighter Direction Ship and all fighter direction for both carriers was controlled from her.

At 0948, a radar contact was made bearing 335° (T), distant 25 miles. The CAP was vectored out to this position and shot down one enemy 4-engine flying boat.

Although various courses had been steered throughout the forenoon, while launching and recovering planes, the general direction of movement was to the southeast. This was because the Point Option course for the planes had been set at 125° (T). However, at 1030, as all but two of the search planes had returned, the direction of movement of the task force was changed to the northeast in order to correspond to a new Point Option of 028° (T). This was done to reduce the distance flown by TF 17 attack groups in their return to the carriers.

At 1055, radar contact was made on a very large group of enemy planes approaching from bearing 020° (T), distance 68 miles, but in spite of this early warning, only one section of 2 VF out of a total of 17 VF available for combat air patrol was vectored to a successful interception before the enemy planes reached their attack positions.

Eight fighters were airborne as combat air patrol when this group of enemy planes was first picked up by radar. Four of these were from the LEXINGTON and four were from the YORKTOWN. These planes were not vectored to intercept the incoming raid, but were, at 1059, recalled to the immediate vicinity of the Task Force. The Fighter Director Officer felt that they were too low on fuel to proceed to an interception at high speed, and then able to fight for any appreciable length of time.

At 1100, the LEXINGTON commenced launching her remaining five fighters, which formed her relief combat air patrol, and, when they had rendezvoused at 1102, they were vectored at maximum speed, and at an altitude of 10,000 feet to intercept the incoming raid. One two-plane section of this group was, shortly after, directed to a low altitude to intercept torpedo planes. This low section intercepted a group of torpedo planes and fighters about 15 miles from the Task Force, but, due to the fighter protection about the torpedo planes, it was unable to reach the torpedo planes until after the torpedoes had been dropped. The high section sighted a group of dive bombers, with accompanying fighters, about 20 miles from the Task Force, but

as the enemy was at a higher altitude, this section was unable to reach a position for attack before the enemy dive bombers had reached the push-over point.

The YORKTOWN launched her remaining 4 fighters at 1105. At 1108 they were vectored on 20° (T) for a distance of 15 miles. When they reached this position, without having made an interception, they were informed that TF 17 was under attack and were directed to return, climbing to 10,000 feet altitude enroute.

The remainder of the combat air patrol was held in the vicinity of TF 17 and although they intercepted some enemy planes, they were not able to do so before they commenced their attack.

At 1112, course was changed to 125° (T) and speed was increased to 20 knots, and at 1113 to 25 knots. At 1118 when the enemy attack struck, the fleet was still on course 125° (T) but the speed had been increased to 30 knots.

An analysis of the manner in which the Fighter Direction was handled shows that only 2 fighters were able to intercept the enemy attack before it had reached the immediate vicinity of TF 17. The combat air patrol was so scattered, at the time of the first contact on the enemy attack group at 1055, that it became necessary to recall it to the vicinity of the carrier. No planes were vectored out to intercept the enemy until 1102. This delay appears to have occurred despite the fact that the Japanese air attack groups were approaching and would soon be over TF 17. When the fighters were finally vectored out they were vectored out too late; in groups too small to be really effective; and at too low an altitude (i.e. 10,000 feet) to insure an effective interception.

It would be of interest to know what considerations governed this action of the Fighter Director Officer, for it would appear as if it would have been wiser to have maintained the CAP in a more concentrated status in the vicinity of the carriers and so stacked in altitude as to give them a reasonable expectation of interception with an altitude advantage. The relief combat air patrol should have been maintained, ready for immediate launching. If this had been done, does it not appear as if the Fighter Director Officer might have been enabled to vector out his fighters more expeditiously and in greater strength? This would probably have permitted interception at a greater distance from TF 17, which is of vital importance in air operations.

There is no information available as to what control was exercised by the Fighter Director Officer over the twenty-three VSB airplanes that were in the air acting as anti-torpedo plane patrol for TF 17 at the time of the

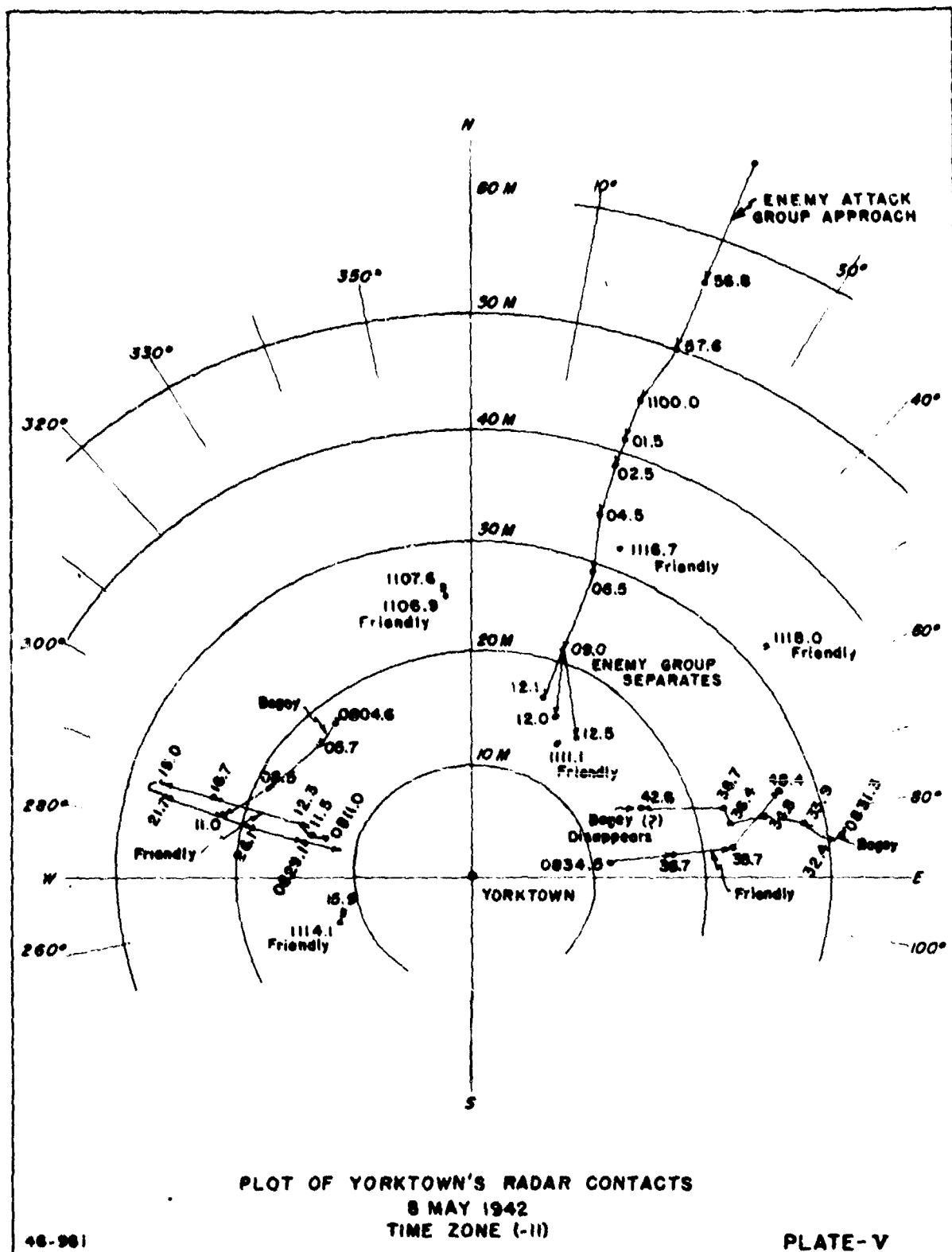
attack. Eight of these planes, from the LEXINGTON, were on station, reportedly, 6,000 yards from that carrier. Eight more, from the YORKTOWN were also on station close to the formation. What sectors, if any, were assigned to each of these patrols is not known. At 1110, the YORKTOWN informed the anti-torpedo patrol that torpedo planes were coming in straight on bearing 020° (T). The LEXINGTON amplified this, at the same time, by giving their distance as 22 miles. The YORKTOWN planes tried to intercept the torpedo planes as they glided in at high speed, but could not catch them. In attempting to intercept, they were attacked by Japanese fighters, and 4 SBD's were shot down and 4 more were damaged. In this melee the Japanese fighters did not entirely escape without injuries, for 4 of them were reported shot down, and several more damaged.

The LEXINGTON anti-torpedo patrol was more successful in its attempt to stop torpedo planes for it, reportedly, shot down eight of them. Four were shot down before they could drop their torpedoes. This patrol, also reportedly, shot down one dive bomber and one fighter, with a loss of only one SBD. One plane from this patrol was lost over the side as the pilot, who had been wounded in the action, was attempting to land aboard his carrier.

The SBD's used by TF 17 on the 8th of May as anti-torpedo patrol were inadequate for the purpose. However, they turned in a performance which is a splendid example of courage and devotion to duty. Although they were outnumbered and were opposed by faster and more maneuverable aircraft, they were not out-fought. They were, however, never designed for this work. The necessity for using them emphasized the urgency for an increase in carrier fighter planes to strengthen the defense against torpedo planes, as well as against other types of aircraft.

The Japanese air attack group, making the counter air attack, closed T.F. 17 on a steady bearing of 020° from the time it was first picked up on the radar screen at 1055 until 1109, a period of fourteen minutes. At 1109 when the group was within 22 miles of TF 17, it broke up into three groups. It had not as yet been intercepted by the combat air patrol.

The exact composition of each of these three groups is not known, but an analysis indicates that the attack element of the center group was probably the dive bombers, and that of the other two groups were torpedo planes. A proportionate share of the total fighter escort apparently accompanied each group. The eastern torpedo group appears to have concentrated on the LEXINGTON, while the other torpedo group concentrated on the YORKTOWN.



Commander Striking Force states that his air attack group consisted of 20 fighters and 70 attack planes preceded by 10 search planes.* An analysis of the Striking Force losses for May 7th shows that 40 VF, 59 VSB and 45 VT were available to Commander Striking Force on the morning of May 8th. If it is assumed that 20 VF were retained for combat air patrol, then the Japanese attack group apparently consisted of a maximum of 20 VF and 72 attack planes. Inasmuch as two of these attack planes might readily have been last-minute non-operational duds, the strength of the attack group as reported by Commander Striking Force appears to have been correct. The attack group, apparently, consisted of 29 VB and 41 VT, although the exact ratio of VB to VT planes is obscure.

The air attack developed from the northeast sector which was up-wind and up-sun from TF 17. The first torpedo planes sighted were seen at about 1113 by ships in the northeast sector of TF 17 screen, at a range of about 15 miles. Each torpedo plane group remained concentrated until within 8,000-10,000 yards of TF 17 when it broke up into smaller groups for attack. These smaller groups made their approach from an altitude of about 6,000 feet in a fast glide, leveling off at 50 to 200 feet, just prior to reaching the dropping point. They dropped their torpedoes initially at ranges varying from 700 to 1500 yards, but later, as the Allied anti-aircraft opposition increased, they dropped them at greater ranges. In this connection it is of interest that the Japanese doctrine, at this time, called for each torpedo to be dropped in such manner that it hit its target immediately after it had leveled off at its set depth. A standard torpedo drop was considered to be one made from a range of about 450-650 yards, at a speed of 160-170 knots and at an altitude of 165 feet.** It is apparent that the majority of the Japanese torpedoes were being dropped beyond this range.

The torpedo plane attack on the YORKTOWN was initiated slightly before that on the LEXINGTON. The first 5 torpedoes were dropped on the port quarter of the YORKTOWN at about 1118. As they hit the water, the YORKTOWN rudder was put right and speed was increased to thirty knots. A total of approximately 8 torpedoes were dropped at the YORKTOWN in this attack. The planes approached initially from the port beam and quarter. As the YORKTOWN maneuvered to avoid the torpedoes, her maneuvering put the planes to starboard. These planes then launched torpedoes at the YORKTOWN, two from her starboard quarter and one from her starboard bow.

The skillful handling of the YORKTOWN during this phase of the action enabled her to avoid all of these torpedoes. Two were seen to run down her port

*Supplemental Report-TRUK-Naval and Naval Air Field Team #8, USSBS, P.28 D.

**United States Strategic Bombing Survey (Pacific) Naval Analysis Division
Interrogation of Japanese Officials, Nav. No. 77.

side, 3 down her starboard side, and 1 crossed ahead of her. The poor timing of the torpedo launchings by the Japanese and the fact that the YORKTOWN was able to present her stern to the on-coming torpedoes in each case, except the one launched on her starboard bow, saved her from torpedo damage. Why the Japanese did not deliver this attack in the form of an anvil on either bow is not clear!

The torpedo attack on the LEXINGTON followed very shortly after the first torpedo was launched at the YORKTOWN. The first torpedo fired at the LEXINGTON was launched on her port bow. This torpedo was followed, very shortly, by at least two more launched on her starboard bow, anvil fashion. Following this, numerous planes attacked on the port side.

As the first torpedo hit the water, the LEXINGTON rudder was put full right and her speed was increased to 50 knots. She had hardly commenced answering this rudder when the Japanese launched torpedoes at her on her starboard bow. Her rudder was now shifted to full left. However, before this change in rudder could take effect, more torpedo planes were seen dropping torpedoes on her port beam and quarter, and the rudder was again shifted to full right. The first torpedo apparently passed ahead; the two dropped on the starboard bow passed astern. However, at 1120, just as the LEXINGTON was finally starting to swing to the right, she was hit by one torpedo on her port side, at about frame 50 just forward of the forward gun gallery. A half a minute later she was hit by a second torpedo on her port side, a little farther aft, about opposite the bridge. Two torpedoes broached about 100 yards out, but although one resumed its depth, both passed clear. Two more torpedoes passed about 100-200 feet ahead, and two others appeared running deep just abaft the port beam and passed under the LEXINGTON between the forward gun elevator and Number 2 gun gallery.

As a result of the after torpedo hit the LEXINGTON took a list to port of 6-7 degrees, due essentially to the flooding of boiler rooms #2, 4 and 6, and of the port sluice tanks as a result of ruptured piping and minor leakage around rivets. These boiler rooms were subsequently pumped dry and could have been placed in operation again if needed. No damage, except slight weeping, occurred to the main holding bulkheads of the torpedo protection system as the result of this hit. Certain fuel oil and reserve feed tanks were reported contaminated. There was no damage to the main propulsion machinery, and the ship continued to make 25 knots for a considerable period after these three boilers were secured. Shock damage to electrical equipment was inconsequential. The list was counteracted by transferring oil from the port service tanks to the opposite starboard sluice tanks. In one hour and twenty minutes the ship was on an even keel.

The eventual serious results that were to develop as the result of the torpedo hit forward on the port side between frames 60 and 65, in the way of the port gasoline stowage tanks, were not immediately apparent. An inspection of the accessible areas affected by the explosion of this torpedo revealed only minor damage, although all of the structural damage resulting from this hit could not be ascertained. However, both main flight deck elevators, which were at flight deck level, were put out of commission due to the loss of hydraulic pressure, and immediately dropped on their safety latches. The IC motor generator room, between the gasoline stowage tanks and the IC room, was closed and the watch was withdrawn, due to the fact that the mechanical exhaust ventilating blower serving this compartment had been put out of commission by the explosion. The motor generators in this compartment were left running, although they appeared to be running hot, probably because of misalignment.

The dive bombers appeared over the LEXINGTON just as the torpedo planes were completing their attacks on that ship. They were first picked up on the port bow, pushing over from an altitude of about 17,000 feet, in dives varying from 40° to 70°. These planes were not readily visible until they were well into the final stage of their dive. The dives were widely dispersed in bearing, but the initial approach was out of the sun. Release altitude was generally at about 2500 feet.

As a result of this dive bombing attack, which lasted until about 1132, the LEXINGTON sustained two bomb hits and at least 5 near misses. The first bomb hit was in the 5-inch ready service locker on the port side between frames 55 and 58. The hit was initially reported to have been made by a 1000 pound bomb, but later analysis indicated that it was a much smaller bomb--probably of not more than 100 to 200 pounds.* The bomb was fitted with an instantaneous fuse and probably penetrated the light side plating just under the flight deck, where it detonated.

The second bomb hit was on the port side of the smoke stack structure, about 9 feet above the 50 caliber machine gun platform. The bomb had an instantaneous fuse and appears to have been similar to that which hit in the 5-inch ready service locker.

The third bomb explosion was a near miss, close aboard on the port side at about frame 87 and abreast the gig boat pocket. This bomb detonated on contact with the water.

*Preliminary Report Loss of LEXINGTON, May 8, 1942, Coral Sea, War Damage Report No. 16--Bureau of Ships, Navy Department, June 15, 1942.

At least two additional near misses occurred on the port quarter and several additional near misses occurred at such an appreciable distance from the ship as to cause no damage. Several of these latter bombs were observed to detonate deep in the water.

As a result of these bomb hits and bomb near misses, the LEXINGTON sustained no damage that seriously reduced her combat efficiency, or that prevented her from landing and launching planes. One 5"/38 gun and three guns of the 20 mm battery in the port boat pocket had been put out of commission. Several men had been killed or wounded in various parts of the ship in the immediate vicinity of the bomb explosions. Three compartments on the third deck in the vicinity of the port boat pocket had been holed by fragments and flooded. Fires had started in the 5-inch ready service locker in the Admiral's country and in the Marines' compartment, but had been soon brought under control. The flight deck in the vicinity of the 5-inch ready service compartment was bulged up slightly and splintered, but the damage was not sufficient to interfere with flight operations.

The dive bombing attack on YORKTOWN commenced at 1124, just after the major portion of the torpedo attack had been completed, and continued until about 1150. All dives were made across the deck, commencing out of the sun. The course of the YORKTOWN was changed with full rudder, generally in the direction of the dive or toward the direction from which it started.

At 1127, the YORKTOWN received its first and only bomb hit. This bomb struck the flight deck near frame 106, about 25 feet forward of #2 elevator, 15 feet inboard of the island structure and penetrated the 3rd deck before exploding above the 4th deck in an aviation store room. Fires started in this store room, but were quickly brought under control and later extinguished. Two additional fires were started in nearby spaces but were quickly extinguished. Air intakes to 7, 8 and 9 boiler rooms were pierced between the second and fourth deck, by fragments, permitting smoke to be drawn into these boiler rooms, and these spaces were evacuated for a short time. However, speed was not reduced below 25 knots. Blast and shock effect on operating equipment was not severe, although some damage occurred. Damage to the flight deck consisted of a hole about 12 inches in diameter which was quickly covered and did not affect flight operations.

Another bomb glanced off the edge of the forward starboard catwalk, just abaft No. 3-5 inch gun and detonated in the water close aboard. Fragments from this bomb, and possibly from another near miss near the starboard bow, pierced the side in four or five places. The largest hole was about 3 inches in diameter and was about 5 feet above the water line. A gasoline

line was cut at frame 20, but no fires occurred, as the lines had been drained prior to the action.

A third bomb exploded below the surface of the water about 20 feet from the port side opposite frame 106. This explosion dished in a seam below the water line and pushed in the lower edge of the armor belt about two inches. Oil leaked from this seam and formed an oil slick.

There were 4 more near misses on the starboard side between the bridge and the bow; 1 near miss on the port quarter and 2 or 3 on the starboard quarter. The latter were close enough to lift the ship and raise the screws clear of the water.

The bomb that hit the flight deck was estimated, at the time, to have been an armor piercing projectile type, weighing about 800 pounds. The depth of penetration, prior to detonation, and the damage inflicted, indicates, however, that this bomb was a 550 pound semi-armor piercing bomb with a delayed action fuse.*

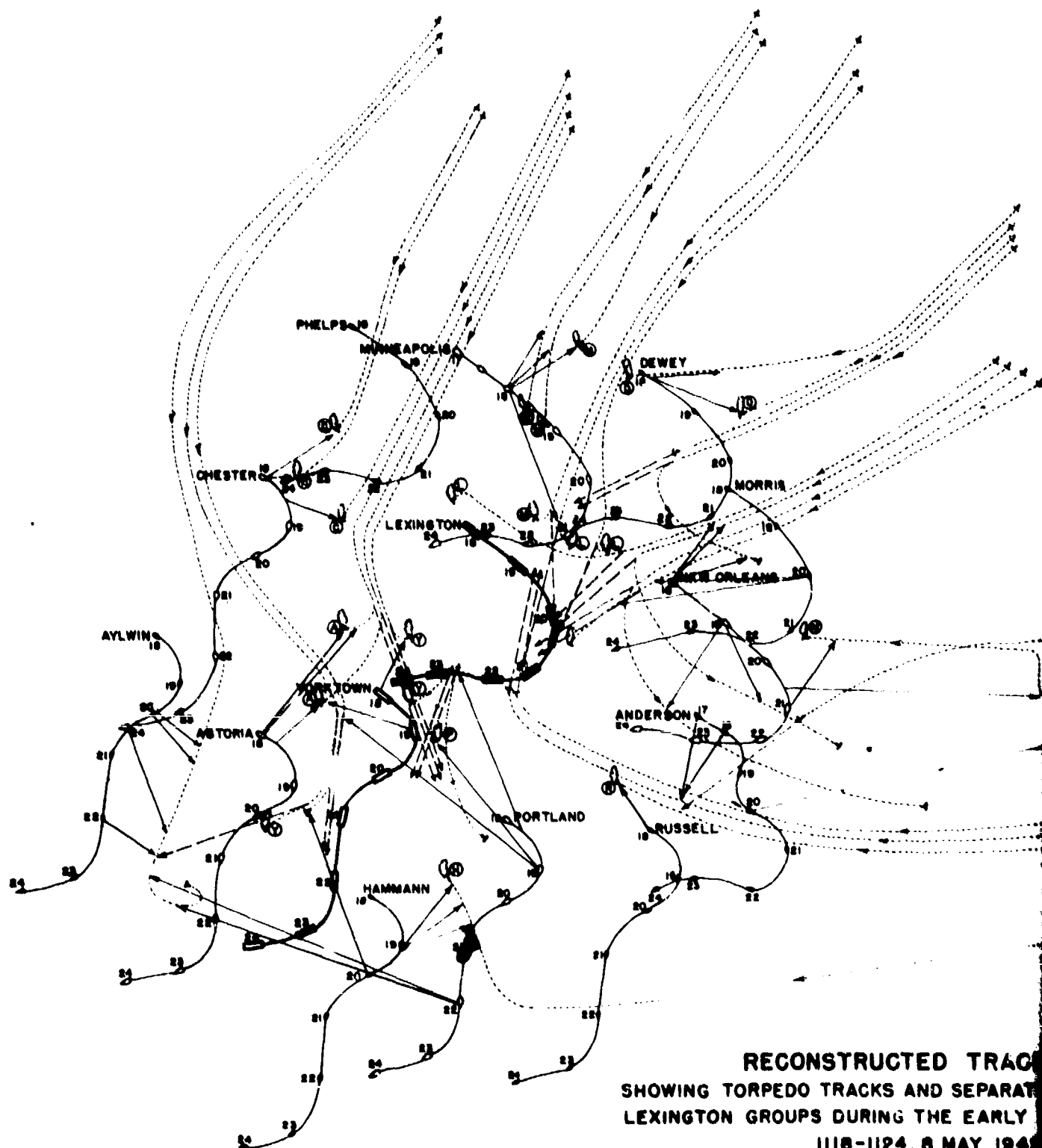
The bomb which caused the slight damage to the port shell was probably of the same type.*

The anti-aircraft screen formed about the LEXINGTON and YORKTOWN was, with the limited number of ships available, not close enough to the units being screened to provide the maximum anti-aircraft fire support against torpedo planes and dive bombers. This screen was weakened by the fact that 4 of the available destroyers assumed positions rather closely concentrated in the eastern semi-circle of the screen, while only 3 widely separated destroyers were present in the western semi-circle. Had the MONAGHAN and the ships of the Support Group been present to fill positions in the anti-aircraft cruising disposition of TF 17 as it was originally designed, then the anti-aircraft screen for the Task Force as a whole would have been more nearly adequate.

During the Japanese air attack, TF 17, in addition to the screen unbalance, broke up into two distinct groups, each of which contained one of the carriers. In this case, this separation occurred because the YORKTOWN and LEXINGTON, in their efforts to avoid torpedoes and bombs, had increased speed to 30 knots and had commenced maneuvering radically, each independent of the other. As a result, two carrier groups were formed which gradually drew apart so that, when the attacks were finally completed, the groups were about 6 miles apart. The ASTORIA, CHESTER, PORTLAND, AYLWIN, HAMMANN and RUSSELL, accompanied the YORKTOWN and formed the YORKTOWN Group, while

*USS YORKTOWN Bomb Damage, May 8, 1942, Coral Sea, War Damage Report No. 23, Bureau of Ships, Navy Department, 28 Nov. 1942.

A



RECONSTRUCTED TRACK SHOWING TORPEDO TRACKS AND SEPARATE LEXINGTON GROUPS DURING THE EARLY

1118-1124, 8 MAY 1942

TURNING CIRCLES EMPLOYED: YORKTOWN GROUP 100
LEXINGTON GROUP 150

EACH NUMBER REPRESENTS ONE MINUTE OF TIME.

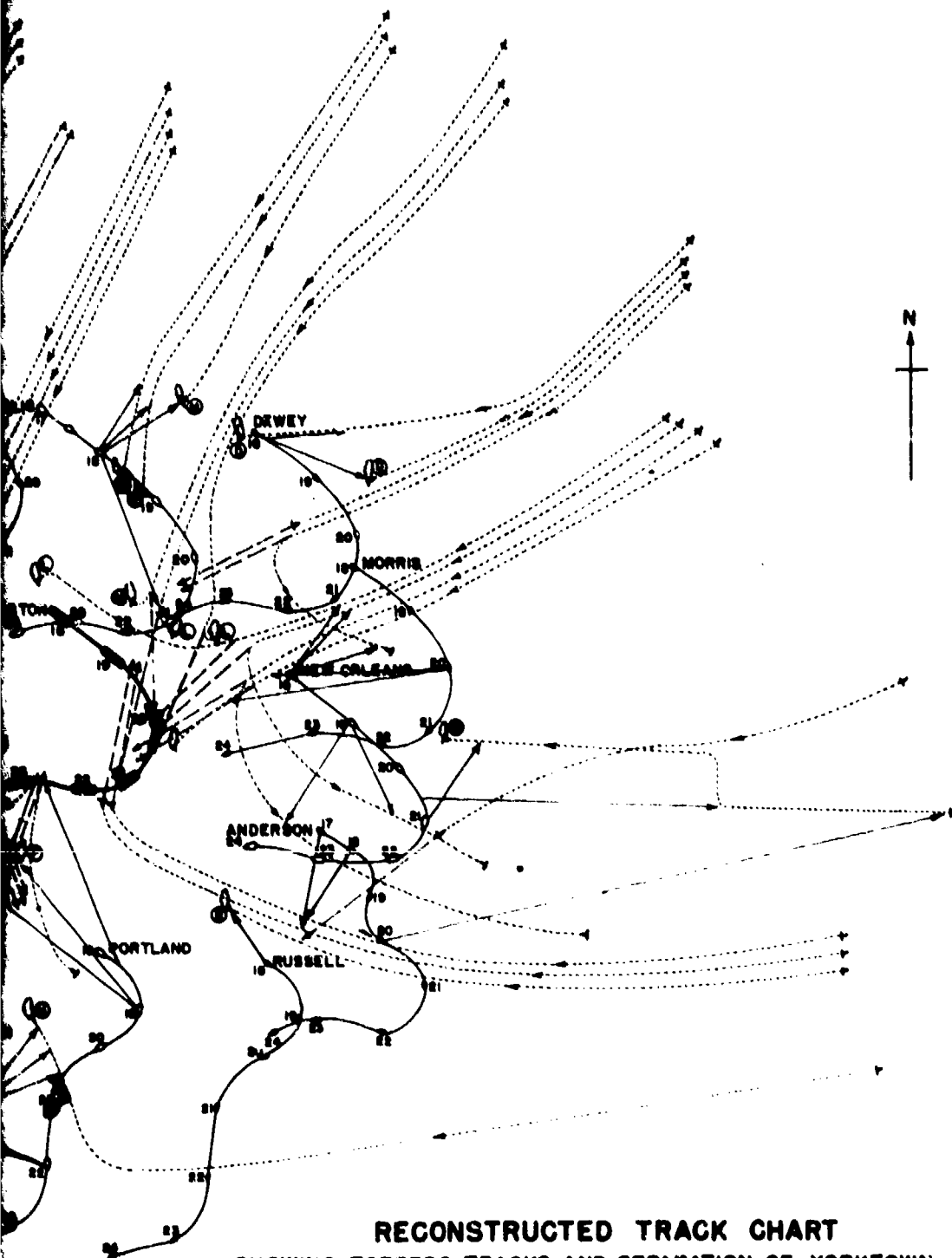
— AA FIRE. — TORPEDOES.

A COMPOSITE OF SHIP CLAIMS HAS BEEN USED TO INDICATE
NUMBER SHOWN IS AN EXAGGERATION.

97a

7

B



RECONSTRUCTED TRACK CHART
SHOWING TORPEDO TRACKS AND SEPARATION OF YORKTOWN AND
LEXINGTON GROUPS DURING THE EARLY PART OF THE ATTACK
1118-1124, 8 MAY 1942-TIME ZONE (-11)

TURNING CIRCLES EMPLOYED: YORKTOWN GROUP 1000 YARDS.
 LEXINGTON GROUP 1500 YARDS.

EACH NUMBER REPRESENTS ONE MINUTE OF TIME.

— AA FIRE. - - - - - TORPEDOES.
 A COMPOSITE OF SHIP CLAIMS HAS BEEN USED TO INDICATE AIRCRAFT SHOT DOWN BUT
 NUMBER SHOWN IS AN EXAGGERATION.

PLATE-VI

97a

h

the MINNEAPOLIS, NEW ORLEANS, ANDERSON, DEWEY, MORRIS and PHELPS remained with the LEXINGTON and formed the LEXINGTON Group.

The YORKTOWN, which had been made the guide for TF 17 just prior to the attack, turned initially to the right to avoid torpedoes, and then continued in a southwesterly direction which carried her directly away from the LEXINGTON, the flagship of the O.T.C., which remained in the immediate vicinity of the original attack area.

Three cruisers and three destroyers accompanied the YORKTOWN, while two cruisers and four destroyers remained with the LEXINGTON. As the YORKTOWN Group moved to the southwest to avoid aircraft attack, all of the ships accompanying it endeavored to maintain their original true bearing from the carrier. No attempt appears to have been made to re-adjust the position of the screening ships to protect the after semi-circle. This was the sector from which the majority of the dive bombers initiated their attack. In the LEXINGTON Group an open sector in the southwest portion of the screen remained open until the latter part of the engagement, when it was filled by MORRIS in accordance with instructions received from Commander Destroyer Squadron Two.

The principal targets for the Japanese torpedo planes and dive bombers were the YORKTOWN and LEXINGTON, but the supporting ships of Task Force 17 were not entirely neglected. One torpedo ran close ahead of the ASTORIA, 1 passed 50 to 70 yards astern of the CHESTER, 2 passed close aboard of the MINNEAPOLIS during her first radical turn, 1 torpedo was seen crossing the ANDERSON's bow close aboard and 1 torpedo plane, in making a run on the PORTLAND, was shot down by the RUSSELL prior to the release of her torpedo. The ASTORIA was straddled but was not hit, although 4 bombs made near misses. Two of these near misses were forward abreast frame 50 and two were aft abreast of frame 110. Two small bombs fell close to the DEWEY and one bomb exploded in the water off the port beam of the PHELPS.

As a result of these attacks the Japanese believed that, in addition to sinking the YORKTOWN and LEXINGTON, they had left one battleship and a cruiser burning.* They appear to have selected certain ships of the screen, both as primary and as secondary targets, which targets they attacked when the intensity of the anti-aircraft fire in the vicinity of the carriers was too strong.

The action reports of individual ships of T.F. 17 and those of their group and Task Force Commanders state that the anti-aircraft fire of the Task Force may have shot down 8 dive bombers and 22 torpedo planes in this attack. These reports also suggest that the combined combat air patrol and anti-torpedo patrol may have shot down, in the vicinity of TF 17, on the

*United States Strategic Bombing Survey, Pacific, Interrogation of Japanese Officials, Notes of Battle from CinC Combined Fleet Staff Log - P.558.

same date, 12 VF, 5 VB and 9 VT. If these figures are accepted as correct, it appears that the Japanese may have lost a total of 22 VF, 11 VB, and 31 VT in the vicinity of TF 17 during their attack on this force.

In addition, to the above, the action reports of the YORKTOWN Air Attack Group state that the YORKTOWN Group may have shot down 10 VF during its attack on the SHOKAKU and 1 VB while returning to the YORKTOWN. The action reports of the LEXINGTON Air Attack Group suggest that the LEXINGTON Group may have destroyed 5 VF and 3 VB during the same phase of the action. If these figures are accepted as correct, then it appears that the Japanese also lost 15 VF and 4 VB as the result of air combat on May 8th in areas other than those in the vicinity of TF 17.

The sum of the above Japanese carrier aircraft losses reported as destroyed by Allied forces, numbers 27 VF, 15 VB and 31 VT, or a total of 73 planes.

This figure of 73 Japanese planes destroyed in combat on May 8th is, however, considered to be considerably in excess of those actually lost from all causes on that date. Commander Striking Force states that after the action, the ZUIKAKU landed the SHOKAKU planes as well as the ZUIKAKU planes and that 4 or 5 planes had to be jettisoned to make room for the remainder of the returning airplanes that were recovered.* As far as can be ascertained, the maximum number of planes carried, at any one time, during the war by the ZUIKAKU as an operating complement, was 27 VF, 27 VB, 18 VT and 3 VS, or a total of 75 operating airplanes.** For the purpose of this analysis, this number is considered to be the maximum that could be landed on her decks without jettisoning or flying off additional planes. A higher ratio of VF types might, however, have increased slightly the total number of planes that might have been accommodated on her decks.

Japanese sources state that, in addition to the planes that returned from the attacks on TF 17 and landed on the ZUIKAKU, 2 carrier planes from this air attack group landed in the water at ROSSEL Island, and 5 or 6 landed in the water alongside the ZUIKAKU. These sources also state that 4 planes landed on the SHOKAKU after she was damaged, but that no planes could be flown off that carrier due to the damaged flight deck forward.*** These statements are considered reasonably correct.

If this analysis is correct, then 92 airplanes were recovered or accounted for by the Japanese carriers after the action. Inasmuch as Commander Striking Force had 122 airplanes available in his carriers prior to the action, this analysis indicates a loss of 30 planes from Allied weapons and 13 others from operational causes or a total of 43 Japanese carrier airplanes lost on May 8th. These figures do not, however, include the airplanes which were recovered by the ZUIKAKU after the action, but which were seriously

*Supplemental Report-TRUK-Naval and Naval Air Field Team #3, USSBS, P.33.

**U.S. Pacific Fleet and Pacific Ocean Areas Weekly Intelligence Bulletin, Vol. I, No. 19, 17 Nov. 1944, P.6.

***USSBS Pacific interrogations of Japanese Officials, Nav.-10, P.54 and 55.

damaged. The number of planes in this latter category was apparently quite high, for Commander Stirling Force states that by morning of May 9th he had only 13 planes in ZUIKAKU ready for operation.*

The Japanese air attack was well coordinated, but differed from the Allied concept of a coordinated carrier air attack in that the torpedo attack preceded that of the dive bombers. Had the timing of the delivery been reversed, and had the torpedoes been launched as the bombs were hitting, more hits might have been obtained, and fewer airplanes lost. The dive bombers appear to have followed each other down the same line of dive in succession. This procedure allowed a heavier concentration of anti-aircraft fire on the dive bombers in their dive and, in many cases, provided sufficient time for the gun involved to follow one plane down, and then to shift to the next plane before that plane had reached its release altitude. Dive angles were approximately as steep as those employed by Allied dive bombers. The Japanese planes, in addition, utilized to best advantage the position of the sun and such cloud cover as was available.

The theory that anti-aircraft fire, even when not effective, would serve to deter the attacking planes was not borne out in this attack. Japanese planes, in order to reach their objective, flew into and through the anti-aircraft fire without hesitation.

The YORKTOWN began recovery of her attack group at 1251, and had recovered all returning planes of this group by 1500. The last remaining plane of the LEXINGTON attack group landed on the LEXINGTON at 1414. This plane was part of a group of torpedo planes which had been fired on briefly by the YORKTOWN as they approached the formation and failed to execute the required recognition maneuvers. They did this because they were too short of fuel. The LEXINGTON Air Group Commander and another plane of his section were still in the air, but they were lost and, although in radio communication with the LEXINGTON, they could not be picked up by radar. One plane reported making land, the other, with the Air Group Commander, was never heard of again. CTF 17 therefore commenced retiring to the southwestward at best practicable speed.

At this time CTF 17 reestimated the situation. He gave consideration to two courses of action; one, the practicability of making another air attack; the other, the practicability of sending in a night surface attack group against the Japanese Striking Force. He felt that one enemy carrier was apparently undamaged, since radio interceptions indicated that at least some of the damaged SHOKAKU planes had been landed on board the ZUIKAKU.

*Supplement of Report-TRUK-Naval and Naval Air Field Team No. 3 USSBS, P.85.

At 1422 he received word from Commander Air that there were strong indications that an additional carrier had joined the Japanese forces. He passed this information to CincPac and to ComSoWesPac, and informed ComSoWesPac of the location of the damaged Japanese carrier at the time she had been attacked by the Air Attack Groups. He knew that the YORKTOWN was capable of making 30 knots, but that the LEXINGTON because of damage was unable to make more than 24 knots. He realized that the YORKTOWN had only 8 VF, 5 VS, 10 VB and 8 VT available for operations. It is not clear whether or not he considered the status of the planes on the LEXINGTON, but he must have known that she had at least 5 VF, 8 VS and 6 VB operational, for these planes were later landed on the YORKTOWN. He also realized that only seven aircraft torpedoes remained in the YORKTOWN. He therefore rejected the first course of action--air attack. He also rejected the second course of action--night surface attack, because of the probability that the ships involved would be detected and therefore subjected to a strong carrier air attack before dark. He decided to retire to the southward for further investigation of damage to ships, to transfer the LEXINGTON's serviceable airplanes to the YORKTOWN, to get aircraft in condition to renew the air attack the next day and to start the LEXINGTON on her way back to PEARL HARBOR for repairs. He informed the Commander-in-Chief Pacific Fleet of this decision.*

Apparently, CTF 17 gave considerable weight to the report that an additional carrier had joined the Japanese Striking Force in arriving at the above decision. He states in his report of the action, "Although the Task Force Commander was unaware at the time, and did not so report, analysis of the reports of the commanding officers of our carriers indicates that our groups attacked separate enemy carriers and severely damaged both." This statement implies that CTF 17, in his evaluation of reports, had previously come to the conclusion that only one carrier had been damaged on May 8th by the combined efforts of his two Air Attack Groups. If this is the case, then he must have felt that the additional carrier mentioned in the report of Commander Air at 1442 could only point to the possibility that there were still two undamaged Japanese carriers for him to contend with. Commander Air, on the other hand, feeling that both the SHOKAKU and the ZUIKAKU had been damaged, had based his opinion that an additional carrier had joined the Japanese Striking Force on the report of one of LEXINGTON's Attack Group pilots that he had seen an undamaged carrier near the scene of the action. Actually, on the afternoon of May 8th TF 17 was superior in strength in all categories to the Japanese Striking Force. The battle efficiency of YORKTOWN had not been impaired, no supporting ships had been seriously damaged, and at least 12 VF, 13 VS, 16 VB and 8 VT were opera-

*Action Report, CTF 17 Serial 0782 dated 27 May, 1942 Para. 26, p.9.

tional, whereas the Japanese Striking Force had in operation in its one carrier, the ZUIKAKU, only 9 planes at this time.*

The ultimate seriousness of the events occurring in the LEXINGTON was not apparent at this time (about 1240). She was on an even keel; two fires had been extinguished and the third, in the Admiral's country, was under control. She was apparently in satisfactory condition. However, at 1247 she experienced a severe explosion, deep in the ship, which the Bureau of Ships believed was caused by an accumulation of gasoline vapors in the I.C. Motor Generator Room, which had been exploded by sparks from operating electrical machinery there. It will be recalled that this space had been abandoned, but that the motor generators had been left running. The exact path by which the gasoline vapors entered is not known, but it is believed that, as a result of the torpedo hit forward in the way of the gasoline stowage space, structural leaks permitted a mixture of gasoline and water to enter the I.C. Motor Generator Room. The flash of this explosion was undoubtedly conveyed through existing duct work, and started fires in adjacent spaces. These fires gradually gained headway and thereafter frequent minor explosions occurred below decks, either from hot 5-inch ammunition or from gasoline vapors.** During this time the LEXINGTON appeared to be steering easily and had been able to land and launch planes.

At 1445 the LEXINGTON suffered a second severe internal explosion. At 1452 she reported that the fires on board were not under control and at 1456 requested assistance.

Conditions in the LEXINGTON proceeded from bad to worse. At 1502 her condition was so bad that CTF 17 advised COMSOWESPAC of this fact and requested air coverage. At 1515, the LEXINGTON requested the YORKTOWN to recover the LEXINGTON planes that were in the air, and shortly afterward at 1518, she requested CTF 17 to have ships stand by to pick up personnel if necessary. At 1610, she reported that she was abandoning lower deck spaces. She secured her Engineering Department at 1650. As a result, she soon lost headway and thereafter remained dead in the water. At 1707, she was directed by Commander Air to abandon ship.

The progressive breakdown of the LEXINGTON prevented the planned transfer of all of her operational planes to the YORKTOWN. Whether she could have launched planes after the explosion that occurred at 1445, is not known, but, it is certain that after she had once lost headway, no planes could have taken off; 35 of them went down with her. Included in this number was one YORKTOWN fighter which had landed on the LEXINGTON.

*Supplemental Report-TRUK-Naval and Naval Air Field Team No. 5, p.54.

**Preliminary Report Loss of LEXINGTON, May 8, 1942, Coral Sea, War Damage Report No. 16-Bureau of Ships, Navy Department, June 15, 1942, P.10 and 11.

However, 19 other planes consisting of 4 VF, 6 VS and 6 VB were saved. These planes had landed on the YORKTOWN; the majority of them prior to 1535.

At 1510, CTF 17 reassumed tactical command and, shortly thereafter, directed that the MINNEAPOLIS, NEW ORLEANS, and 3 destroyers remain with the LEXINGTON and furnish such assistance as might be required, while he covered the operation from a position nearby. When the LEXINGTON commenced to abandon ship, CTG 17.2 was directed to take charge of rescue operations and expedite getting personnel off the LEXINGTON. This task was completed by 1855, and CTG 17.2 then proceeded, with all the rescue ships except the PHELPS, to rejoin CTF 17 on a southwesterly course.

The PHELPS was detailed to sink the LEXINGTON by torpedoes. She therefore fired five torpedoes into her between 1915 and 1952. Of these torpedoes, four made satisfactory runs and exploded on hitting, whereas the fifth torpedo was a dud and failed to explode. The LEXINGTON sank at 1952 in Lat. 15°-12' S., Long. 155°-27' E.

Allied shore based reconnaissance airplanes from Australia and PORT MORESBY made numerous contacts with units of the retiring PORT MORESBY Invasion Force during May 8th, but their efforts in other respects had no direct influence on the action in the CORAL SEA. Although COMSOWESPAC had been notified at 1000 and at 1440, of the location of the Japanese Striking Force, his shore based aircraft was apparently unable to locate it, for no attack was made by these planes on this force. During the day six B-17's and three B-26's bombed a disposition containing 11 transports and 6 combatant ships bearing 347° (T), distance 190 miles from DEBOYNE Island, but made no hits.

During the afternoon of May 8th, CTF 17* received a dispatch from CINCPAC directing him to retire from the CORAL SEA area. This dispatch is not available and its time of origin, its time of receipt and the exact wording of the directive is not known. It appears to have been sent by CINCPAC after he had received the dispatches from CTF 17, which informed him of the results of the action fought on May 8th.

CTF 17 remained on a southerly course during the night of May 8th and 9th, and continued, thereafter, in a southerly and southeasterly direction until 2000 on May 10th, at which time he changed course to the eastward.

At about 1600 on 11 May he separated TF 17 into two groups. One group, under CTG 17.2, with the MINNEAPOLIS, NEW ORLEANS, ASTORIA, ANDERSON, HAMMANN,

*Statement by Rear Admiral Frank J. Fletcher, USN to Captain F.C. Dickey, USN from Department of Analysis, Naval War College, February 1947.

MORRIS and RUSSELL, proceeded to NOUMEA, while the other group under his own command, continued on to TONGA TABU with the remainder of the Task Force.

The withdrawal of TF 17 from the CORAL SEA area was unopposed. On the morning of 9 May, at about 0925, an airplane, of the morning search from the YORKTOWN, reported an aircraft carrier bearing 310° (T) distance 175 miles from TF 17. Two sections of dive bombers were launched to destroy this carrier, but the contact proved to be a small island or reef. An attack group of 3 B-25, 2 B-26 and 9 B-17 airplanes was launched from an Australian base to locate and bomb this carrier, but upon discovering that the contact was false, the Attack Group appears to have returned to its base without having dropped its bombs on a secondary target.

Allied shore based aircraft continued their reconnaissance missions and attacks on Japanese Shore installations in the areas bordering the SOLOMON SEA. Their bombing attacks on the Japanese seaplane base in the vicinity of DEBOYNE Island on May 9th, 10th and 11th, destroyed a large proportion of the reconnaissance seaplanes based there, and neutralized the value of the shore installation for further use by the Japanese. The supporting ships and the remainder of the seaplanes were therefore withdrawn from DEBOYNE Island and the base abandoned by the Japanese.

On May 10th, CTC 17.9, Commander Search Group, modified his plan of seaplane search from NOUMEA in order that he might more effectively conduct a search for the survivors of NEOSHO and SIMS. This modification of the search plan is indicated on Diagram G. At the same time, he established a daylight anti-submarine patrol of 3 PBV's about the approaches to NOUMEA Harbor to assist in preventing further damage to Allied shipping in that area by the Japanese submarine that sank the Greek ship CHLOE by gunfire on May 7th.

Three Japanese 4-engine patrol seaplanes were seen at TULAGI on May 10th, but whether this sighting was made by land based reconnaissance planes or by coast watchers is not known. At 1040 on this same day a Japanese plane of this type, apparently operating out of TULAGI, attacked a PBV search plane from NOUMEA in a position about 475 miles bearing 325° (T) from the latter's base. In the ensuing engagement neither plane was shot down, although the PBV suffered minor damage and claimed to have destroyed one engine in the Japanese plane.

At about 0541 on the morning of May 11th the Allied submarine S-42 in Lat. $05^{\circ}-06'$ S, Long. $155^{\circ}-48'$ E., about midway between BUKA Island and the southern tip of NEW IRELAND, sank with torpedoes what she reported to be a Japanese cruiser. This Japanese cruiser, however, turned out to be the Japanese mine layer OKINOSHIMA, which had been so successful in avoiding serious damage in the air attack on TULAGI on May 4.

OPERATIONS OF STRIKING FORCE, May 8th

During the preceding operations of TF 17 the Japanese forces continued the operations of the previous day. The Striking Force continued in a generally northerly direction throughout the remainder of the night of May 7th-8th. At 0600 May 8th, that is about forty-five minutes before sunrise, in position bearing 089° (T), distant 125 miles from the center of ROSSEL Island, Commander Striking Force launched an air search of about 10 search planes to search the sector 145° to 235° (T), to a radius of 200 miles. At 0700 the Striking Force changed course from north to the southwest. At this same time the second section of CruDiv 6, the KINUGASA and FURUTAKA, joined and were a welcome addition to that force, as it now had four heavy cruisers in its screen. At about 0835 one of these search planes reported sighting the enemy. At 0915 the Striking Force launched an attack group consisting of 70 attack planes and 20 escort fighters, which was directed to proceed along the Median line (190° T.) of the search sector.* The reason for departing from usual Japanese doctrine of launching the attack planes within an hour of the search planes is not clear, nor is the delay of 40 minutes between the sighting report and the launching of the attack. After launching, Commander Striking Force proceeded at 30 knots toward the estimated position of the U.S. Force.

The search planes had sighted Task Force 17 at 0622 and reported its position, at 0655, as bearing 170°, distant 180 miles from ROSSEL Island, and its composition as 2 CV, 1 BB, 2 CA, 5 DD.** The attack groups were guided to the attacking position by some of the search planes. The attack was made, and according to Japanese reports, was very successful. The Japanese thought that they had either sunk both carriers or had sunk one and damaged the other. However, as 80% of the pilots reported that both carriers had been sunk, Commander Striking Force reported to both Commander 4th Fleet and to Tokyo that he had sunk two American carriers.*** This shows that the Japanese pilots were not good in recognizing damage as, at this time, both LEXINGTON and YORKTOWN, although hit, were underway and making 25 knots. The LEXINGTON was not sunk until about 7 hours later in an area about 40 miles to the south of the battle area. The Japanese claimed, in addition to the above 2 carriers, that they had heavily damaged 1 battleship and 1 cruiser (classification not certain).

The Japanese further reported that in this action they had lost 15 planes through combat or AA gunfire, and had lost other planes operationally; number

*Track Chart "Battle of the Coral Sea" prepared by Lieut. Comdr. Henry Salomon, Jr. USNR, in cooperation with G-2 SCAP, TOKYO, JAPAN. Japanese track chart work done by several Japanese officers headed by ex-Rear Admiral Tomioka, IJN at Naval War College, Tokyo.

**Combat Report No. 7, CruDiv 6, dated 17 July 1942, WDC #160997, P.10.

***Supplemental Report-TRUK-Naval & Naval Air Field Team #5, USSBS, P.28-E.

not reported. Some of these planes had landed in the water at ROSSEL Island and most of the pilots had been saved.*

Prior to return of the attack groups from their attack on TF 17, the Striking Force had been located by the Allied planes and an attack had been made on the SHOKAKU. The Japanese ships were now operating in the frontal area which had shielded TF 17 the previous day. The visibility in the vicinity of the Striking Force varied from 2 to 15 miles. Cumulus, alto-cumulus and cirrus clouds covered the area. Intermittent rain squalls impaired flying conditions still further.

When the Allied planes appeared, the ZUIKAKU was headed for a rain squall and thus averted attack, although one competent Japanese observer says that she had to dodge torpedoes. Commander Striking Force was in the ZUIKAKU. When the ZUIKAKU emerged from the rain squalls, Commander Striking Force noted the SHOKAKU burning. The SHOKAKU reported that she had been hit by three bombs dropped by dive bombers, and sustained 8 near misses. She was able to dodge the torpedoes because they were launched at so great a range and ran so slowly that they were easily avoided.** She received 2 bomb hits forward, which badly damaged the flight deck, rendered her unable to launch planes and started gasoline fires. The third hit was on the starboard quarter and started fires. All fires were soon put out and the SHOKAKU, without escort, left the scene of action at 30 knots and proceeded via TRUK to KURE Naval Base where repairs were completed on 19 July.***

The normal distance between two Japanese carriers in formation was at that time 700 meters, but during launching operations it was normal to increase this distance to 1500 meters. This was because the Japanese rarely landed or launched from more than one carrier at a time and the carrier launching planes would often, to quote Commander Striking Force, "Wander apart".

At the time of the attack on the Striking Force, the SHOKAKU was launching additional planes and steaming into the wind on course about 145° (T). The ZUIKAKU, which was not launching planes, was endeavoring to close the range to TF 17 as rapidly as possible, and was continuing on course 190° (T) at high speed. As a result, the two carriers were unfortunately separated by about 15,000 meters at the time of the action. Commander Striking Force stated later that he erred in not turning back when the attack appeared, and

*Supplemental Report-TRUK-Naval & Naval Air Field Team #3, USSBS, P.28-E.

**Interrogation of Captain Yamaoka, I.J.N. Operations Officer, Staff 5th Air Flotilla, USSBS Naval Analysis Division Interrogation of Japanese officials. Volume I-Interrogation Nav. No. 10.

***Headquarters USSBS, Tokyo, Naval Analysis Division, Memorandum No. 11, dated 16 October 1945, P.1.

endeavoring to rejoin the SHOKAKU.* Thus about one half of the anti-aircraft batteries of the task force were available to defend the ZUIKAKU, which actually did not require them because of the rain squall, and were denied the SHOKAKU, which did require them. Why Commander Striking Force did not keep his command together with the prospect of an enemy air attack is not known for it appears that he thought that his planes had caught the Allied carriers by surprise, and he apparently discounted or overlooked the enemy capability of attacking him.

Immediately after Commander Striking Force had discovered the damage to the SHOKAKU, he appears to have ordered her to proceed north to TRUK for repairs. So, at about 1500 in compliance with these orders the SHOKAKU departed for TRUK at 30 knots. This indicates Commander Striking Force's confidence that he had sunk the Allied carriers, and had, thereby, gained local command of the immediate sea area.

In view of the fact that the damage to the SHOKAKU prevented her from receiving her planes retiring from the attack on the Allied carriers, Commander Striking Force apparently directed that the ZUIKAKU receive them. This operation crowded her deck so much that she had to jettison three or four planes. The number of damaged planes landed further complicated her efforts, and it was not until 1500 that she had a total of nine planes ready to launch again.**

At 1500 Commander 4th Fleet directed Commander Striking Force to "make repairs and change course to north." This dispatch was time grouped 1240.*** Here again, is another delay in transmission of important messages, which indicates that the Japanese communication system was having difficulties under the increased load of combat messages.

Commander Striking Force having heard nothing of the enemy since 1140, notified Commander 4th Fleet of the situation and stated that he had very few planes available to launch. Meanwhile, he headed in a northerly direction while awaiting reply. At 1800 he received a reply directing him to proceed to TRUK. While this action of Commander 4th Fleet may seem strange, in the light of present day knowledge, it must be remembered that he had been informed that both Allied carriers had been sunk and its battleships sunk or damaged, and, further, that few combat planes remained in the Striking Force. At 2500 Commander 4th Fleet ordered postponement of the invasion of PORT MORESBY and directed that the command render necessary assistance to the

*Supplemental Report-TRUK-Naval & Naval Air Field Team #3, USSBS, P.30-32.

**Supplemental Report-TRUK-Naval & Naval Air Field Team #3, USSBS, P.34.

***Combat Report #7, CruDiv 6, Period 25 Apr. 1942 to 11 May 1942, dated 17 July 1942, WDC #160997 - P.11.

NAUMU and OOKAN Island operation, which was scheduled for May 15th. Why, under the favorable military situation then existing, Commander 4th Fleet issued these directives is not clear. It is presumed, however, that he felt that the ZUIKAKU, with her limited aircraft available because of battle losses and battle damage, was not able to cover adequately the invasion forces against the Allied land based aircraft which would be encountered in this amphibious invasion. He appears to have held this idea even though his own land based aircraft would have been in a strongly supporting role. It is possible also that he felt that the Midway operation, which was pending, might require both the ZUIKAKU and the SHOKAKU. However, his actions did not meet with the approval of Commander Combined Fleet, who, at 2400 ordered the annihilation of the remaining enemy forces.*

This appears to have been the correct decision and not that of Commander 4th Fleet. For, if the air attack had been as successful as reported by Commander Striking Force, an opportunity now presented itself to destroy any damaged enemy ships which had not succeeded in making their escape, and, in addition, it might be possible to so damage fleeing Allied ships as to make them fall a relatively easy victim of Japanese surface forces. The fact that such a condition did not obtain does not in any way vitiate the thought that every Commander should always maintain the spirit of the offensive, and should endeavor after every action to insure that so long as it contributes to the accomplishment of the strategical plan, the maximum destruction is dealt the enemy.

In response to the directive of Commander Combined Fleet to annihilate the enemy, the Striking Force followed the track indicated in Diagram G.** By heading east, and later southwestward, Commander Striking Force appears to have been endeavoring to interpose between TF 17 and the newly established Japanese base at TULAGI, while at the same time blocking escape through the RENNELL-SAN CRISTOBAL Island Channel and through the Strait between the Lower Solomon Islands and the NEW HEBRIDES. The Striking Force change of course at 1850 May 8th from an easterly course to a southwesterly course appears to indicate an appreciation of the fact that the Allies were retiring to the south. This change of course could have been based on the report from the I-28, to be discussed later.

There is nothing to indicate that Commander Striking Force made any air searches. It is quite possible that he did not do so, for he was extremely

*Combat Report #7, CruDiv 6, Period 25 Apr. 1942 to 11 May 1942, dated 17 July 1942, WDC #160997, P.11.

**Track Chart "Battle of the Coral Sea" prepared by Lieut. Comdr. Henry Salomon Jr. USNR, in cooperation with G-2 SCAP, TOKYO, JAPAN. Japanese track chart work done by several Japanese officers headed by ex-Rear Admiral Tomioka, IJN at Naval War College, Tokyo.

limited in planes and pilots, and would probably need all he had to attack any enemy ships encountered. He apparently relied on land based air searches for his reconnaissance and this should have been a reasonable procedure, as TULAGI was now activated.

The Striking Force continued its southerly course at speeds varying from about 10 knots to 30 knots. At 1200 it was joined by the first section of CruDiv 6, plus YUBARI and OITE. At 1245 May 10th, no contacts with the enemy having been made, course was reversed and retirement was begun. At 2215 CruDiv 6, plus YUBARI, were detached and headed for KIETA on BOUGAINVILLE Island.*

The Striking Force in the early morning of May 11th received orders to leave the area, for at 0800 May 11th, it changed its course radically to 080° (T). It then headed out of the Coral Sea and around the southern tip of SAN CRISTOBAL Island at an average speed of about 25 knots. At 2400 May 11th it was in Lat. 9°-05' S., Long. 162°-20' E, apparently heading for TRUK.

Operations of other Japanese Task Forces, May 8th, 9th, 10th & 11th.

Having separated from the second section at 2530 May 7th the first section, AOBA and KAKO, which had been directed to fuel at sea, proceeded towards its rendezvous with the oiler IRO, which rendezvous had been designated at 225° (T), distant 100 miles from SHORTLAND Island. At 0835 this section received a report that planes of the Striking Force had at 0822 spotted an enemy carrier group consisting of 2 CV, 1 BB, 2 CA, 5 DD, bearing 170° (T), distant 180 miles from ROSSEL Island. At 1120, Commander 4th Fleet directed all forces not concerned with the attack on the enemy carrier force to retire to the RABAU area, as he had decided to concentrate his main effort against the Allied Task Force.** At about this time, the Port Moresby Invasion Force consolidated with CruDiv 18, consisting of the light cruisers TENRYU and TATSUDA, and with DesRon 8 in Lat. 8°-29' S, Long. 154°-29' E. Commander 4th Fleet's decision to concentrate his main effort against the Allied Task Force and to retire the forces not contributing to this effort, indicates the overall command being exerted by Commander 4th Fleet and further indicates the value of unity of command.

At 1030, the IRO was sighted and by 1500, the first section had commenced fueling from her. However, this fueling had no sooner commenced when a report was received from Commander Striking Force in plain text that he was "engaging enemy task force, together with CruDiv 6. Position 255°, 210 miles from TULAGI at 1250." A plot of this position showed that the Striking Force was bearing

*Combat Report No. 7, CruDiv 6, dated 17 July 1942, WDC #160997, P.13.

**Combat Report No. 7, CruDiv 6, dated 17 July 1942, WDC #160997, P.10.

165° (T), distant 265 miles from the IRO. ComCruDiv 6 directed, as he was not sure of the position of the Allied forces, that the fueling be discontinued immediately, because he thought that the enemy might surprise him while fueling and he wished to have freedom of action.*

At 1800, planes from the 25th Air Flotilla reported having sighted at 1080 an enemy force consisting of 1 BB, 2 CA, and 4 DD bearing 235° (T), 240 miles from DEBOYNE. There was, apparently, a communication delay of about 2½ hours.

Having discontinued fueling the first section of CruDiv 6 headed south towards the enemy at 26 knots. While thus closing the enemy, a report was received, presumably from Commander Striking Force, that the SHOKAKU had been damaged. A later report received stated that the SARATOGA had been sunk and that three hits had been made on another Allied carrier of the YORKTOWN class. This was followed by a report that both Allied carriers had been definitely sunk.

During the afternoon, while still en route south, the first section was directed, presumably by Commander 4th Fleet, to convoy vessels south of RABAU, but from the tracks of the first section's movements it appears that no action on this order was taken at this time.**

At 1855, having received Commander 4th Fleet's dispatch "Stop attack and proceed north", the first section of CruDiv 6 discontinued its movement to the south and headed for SHORTLAND Island. At 2400, May 8th, this section was bearing 195° (T), 25 miles from that island.

The first section did not proceed immediately into the harbor. At 0530 it was ordered by Commander 4th Fleet to complete fueling and then join the Striking Force in annihilating the enemy forces. At 0721, it put into SHORTLAND Island harbor and commenced fueling from the IRO and the MIMUROYAMA-MARU. At about 1200, the first section, which had completed fueling, was joined by two ships of DesRon 6, the YUBARI, a light cruiser and the OITE, a destroyer, and then proceeded to sea. At 0400, the OITE which had found the seas difficult as the spray broke her bridge glass, slowed and fell behind.

The remaining units of DesRon 6, consisting of the DesDivs 25, 29, and 30 less the YUBARI and OITE, received orders to continue their duties under Commander Minelayer Division 18. DesDiv 30 was engaged thereafter in escorting

*Combat Report No. 7, CruDiv 6, dated 17 July 1942, WDC #160997, P.10.

**Combat Report No. 7, CruDiv 6, dated 17 July 1942, WDC #160997, P.11.

the Port Moresby Invasion Force to RABAU.

At 1200, May 10th, the first section plus YUBARI and OITE which latter destroyer had evidently rejoined, rendezvoused with the Striking Force. Thus the first and second sections of CruDiv 8 had now rejoined one another and CruDiv 8 (less SAZANAMI) became an entity again.

The Striking Force, plus CruDiv 8 plus the YUBARI and OITE, continued on to the south until 1245 when they reversed course and retired, following the tracks in Diagram G. Nothing was sighted so, at 2215, CruDiv 8 plus the YUBARI less the OITE, which apparently remained with the Striking Force, were detached from the Striking Force and headed for KIETA, BOUGAINVILLE Island, where it arrived at about 1600, May 12th.

CruDiv 8 log states that the Japanese forces at DEBOYNE, which had had most of their reconnaissance seaplanes and shore installations destroyed by Allied land based air attack on May 9th, withdrew from that base on the next day.

At 1840 May 9th the submarine I-28 appears to have made a report about an enemy plane from which ComCruDiv 6 estimated that the enemy forces which were thought to be heading for TOWNSVILLE appeared, in fact, to be heading along the east coast of AUSTRALIA for SYDNEY, and to quote Japanese sources, were "beating a hasty retreat." ComCruDiv 6 estimated that the Allied force was, at this time, 600 miles away from him.* This estimate was correct, but the direction appears to have been somewhat different than estimated.

The Submarine Force was ordered to discontinue search and return to TRUK.

The Port Moresby Invasion Force, after consolidation with CruDiv 18 plus DesRon 6, continued on towards RABAU and arrived there safely on May 10th.

The 25th Air Flotilla on May 8th, 9th, and 11th apparently engaged in normal scouting operations. It made a contact at 1030, May 8th, with Allied forces consisting of 1 BB, 2 CA, and 4 DD, in position 235°, distant 240 miles from DEBOYNE, course 300°, speed 16 knots. Its log states that there was no opportunity for attack because the type 96 land attack aircraft unit

*Combat Report No. 7, CruDiv 6, dated 17 July 1942, WDC #160997, P. 12.

was unserviceable.* This seems surprising in view of the fact that the log for May 7th indicates that it was planned to make a powerful attack with all forces on any enemy forces sighted on May 8th. What, if anything, happened to the attack units overnight is not available. A large proportion of the Zero fighters were transferred from RABAU to LAE at this time.

On May 9th nineteen aircraft were sent out on search missions, but made no contacts. Fourteen Zero fighters attacked PORT MORESBY with what the Japanese called "fair results." No information of the success of this attack is available from Allied sources. The 25th Air Flotilla received orders from 11th Air Fleet to carry out immediate reconnaissance of TOWN-SVILLE Harbor, but since all aircraft available were on reconnaissance missions this attack was planned for the next day.* This shows the close contact that Commander 11th Air Fleet was maintaining over the operations of the 25th Air Flotilla, but it also indicates an interference with Commander 4th Fleet. For any direct order by Commander 11th Air Fleet concerning air operations to Commander 25th Air Flotilla, which flotilla was under the operational control of Commander 4th Fleet, unless approved by Commander 4th Fleet, could have an adverse effect on the latter's operations. Special efforts were also planned on the 10th against Allied submarines which were proving a nuisance in the straits in the RABAU area. Patrol aircraft were directed against submarines as their primary objective unless special orders to the contrary were issued.

No patrols appear to have been made on May 10th. The DEBOYNE base was evacuated on that day and the 25th Air Flotilla received word that the operation against PORT MORESBY had been postponed until 3 July.

On May 11th, patrols were continued. The enemy air forces in NEW GUINEA and NORTHERN AUSTRALIA were attacked, and the reconnaissance of TOWNSVILLE was carried out, but no enemy ships were sighted.**

The Battle of the Coral Sea had ended!

*War Diary of 25th Air Flotilla, 1 April to 11 May 1942, WDC 161725 P.6.

**War Diary of 25th Air Flotilla, 1 April to 11 May 1942, WDC 161725 P.6-7.

THE EFFECT OF THE BATTLE

If victory at sea were based alone on carriers sunk and damaged, and upon temporary control of the action areas, where the battle was fought, the Battle of the Coral Sea would necessarily be classed as a Japanese victory. For the loss of the LEXINGTON and the slight damaging of the YORKTOWN, were more serious blows to the Allies, at the time, than the loss of the SHOHO and the slight damaging of the SHOKAKU were to the Japanese. In addition, TF 17 with the YORKTOWN, left the area immediately after the action and made no further effort to attack the Japanese carriers, whereas Japanese forces conducted a search by ships and planes for two days to discover any Allied forces left in the area.

Victories at sea are not necessarily always based on ships lost or tactical successes gained. They are more often based upon the effect such losses or tactical successes may have upon ultimate victory; upon the extent to which such losses or tactical successes contribute to the accomplishment of the strategical plan. In naval warfare it is not sufficient merely to hold the action area as such; it is far more important to ensure that the action contributes its full share towards the accomplishment of the plan, and hence, towards ultimate victory.

When the Battle of the Coral Sea is evaluated on this basis, the point of reference changes. The reference is not upon the action area, but rather upon the overall effects of the battle itself. What were these overall effects?

In the first place, the Japanese decided that, whereas they still desired to capture PORT MORESBY, they would no longer attempt to do this by amphibious invasion at this time, and they delayed further action by sea.* After the defeat at Midway, they decided about 1 July 1942 that further attempts would be by land operations only. Thus the Allies by the Coral Sea action had succeeded in checking further Japanese advances by sea in the NEW GUINEA-SOLOMON Area. This was a cardinal objective in the Allied strategical plan for the Pacific War.

In the second place, it is quite possible that the report to TOKYO by Commander Striking Force** that two American carriers of the SARATOGA and YORKTOWN classes had been sunk, assisted TOKYO in deciding to go ahead with the MIDWAY Operation, which resulted most disastrously for the Japanese.

*Interrogation of Captain Yamaoka, I.J.N. Operations Officer Staff 5th Air Flotilla, USSBS-Naval Analysis Division-Interrogation of Japanese Officials - Vol. I Interrogation Nav. No. 10 Page 55.

**Supplemental Report-TRUK-Naval & Naval Air Field Team #3, USSBS - Page 28 E.

In the third place, the damage to the SHOKAKU and the shortage of operational planes on the ZUIKAKU prevented both of these carriers from being in the Battle of Midway.* This shortage of planes in the ZUIKAKU was the result of battle and operational losses for which no aircraft or air crew men and pilot replacements were available in the area. While there is no certainty that, had these carriers been present at Midway, they would have changed the outcome, the fact nevertheless remains that the Japanese attribute part of their failure to the absence of these carriers.

On the other hand, in the case of the Allies, while the loss of the LEXINGTON was keenly felt at the Battle of Midway, this loss was not sufficient to prevent an American victory there. The YORKTOWN had been repaired in time for the action and served gallantly.

Based on these facts, it must be historically true that the Battle of the Coral Sea was a definite and far-reaching Allied success.

BATTLE LESSONS

1. The Battle of the Coral Sea was brought on in part by the raid on TOKYO on April 8, 1942. This raid did not accomplish any particular material damage. It did, however, lift the morale of the Allies, which at the time, considering the surrender of BATAAN and the situation in general in the Far East, was at a low ebb.

The net result of the TOKYO raid was, however, that the Japanese commenced offensive operations again, this time towards PORT MORESBY, in order to secure the safety of RABAU, and as a first move towards extending the perimeters of their conquered areas, to protect their homeland from further raids. The Allies were forced to counter this operation with limited forces, as the TOKYO raid, naturally, had the effect of reducing their means available for service in the Coral Sea Area. Japan had 3 carriers in the area at the time of the battle; the Allies were only able to concentrate 2. Had the TOKYO raid not occurred, 4 carriers, the YORKTOWN, LEXINGTON, HORNET and ENTERPRISE, would probably have been available. The LEXINGTON and YORKTOWN were already in the area; the HORNET and ENTERPRISE, which conducted the TOKYO raid, were en route from Pearl Harbor, having departed for the Coral Sea on April 30.

Lesson:

This whole operation stresses the strategic principle that a raid may have strategic consequences far above those originally contemplated. This

*Interrogation of Captain Yamaoka, I.J.N. Operations Officer Staff 5th Air Flotilla, USSBS-Naval Analysis Division-Interrogation of Japanese Officials - Vol. I Interrogation Nav. No. 10 Page 55.

raid was too small to do substantial physical damage, yet its political effect, caused by the fear of additional raids, was great and, in this case, appears to have caused Japan to change military time schedules for other theaters. Apparently, her plan for the occupation of PORT MORESBY was expedited, and her decision to go ahead with the broad strategic plan, including the capture of MIDWAY, was firmed.

2. The divided command which existed at the Battle of the Coral Sea exerted an adverse effect on the fortunes of the Allied forces. CTF 17 had no control over the land based air searches and, as a consequence, was forced to accept that which was given him. Had all aircraft been under his direct command, or had he been placed under Commander Naval Forces SoWesPac for this operation, it is logical to assume that the searches made and the areas covered would have all contributed as fully as practicable, rather than only partially, to the accomplishment of the plan. Diagrams B-1 and B-2 point out plainly that the areas which he was informed were going to be searched were not, in fact, adequately searched at all. CTF 17 apparently, was not advised of this fact.

Lesson:

It is advisable to maintain the overall command of the joint services in the hand of the Command with the paramount interest. This was done by the Japanese, who placed the command under Commander 4th Fleet at RABOUL. The single command that Commander 4th Fleet exercised is apparent throughout this study of the action. The forces assigned this Commander were, with the exception of the South Seas Detached Force, all Naval forces. This includes naval land based air.

3. The Japanese planning for this operation does not appear to have been very thorough. Japanese forces were not adequately coordinated, with the result that the Allied task forces were able to strike them and destroy certain of their forces separately before they were able to concentrate. This appears to have been the result of an unhealthy mental attitude of over-confidence.

Lesson:

Adequate planning, either mental or written, is always a "must", and is particularly important when a number of task forces or groups are to be coordinated into a common effort.

4. The Japanese appear to have relied greatly on surprise in all of their planning. They appear to have entertained the naive belief that, when they so desired, they could conduct their operations with complete secrecy. Al-

though it is true that the existence of their Striking Force was unknown to the Allies until it had attacked the NEOSHO, nevertheless this was purely a fortuitous circumstance and, probably, could not have been repeated. The Striking Force should have been discovered by May 5th by Allied carrier planes. The Japanese probably knew at this time of Allied radar, but it is doubtful if they knew of the extent of its employment or of its capabilities.

Lesson:

Surprise is the injection of the unexpected for the purpose of creating an unfavorable military situation for the enemy. When judiciously conceived and successfully employed it may be a most potent factor.* However, it must not be counted on too heavily in planning. There must be sufficient means available to insure success even though surprise be not obtained.

5. The Japanese, apparently, endeavored to estimate the course of action the enemy intended to follow, and then based their plans on this estimate of the enemy's intention. They do not appear to have given adequate weight to other important enemy capabilities, which might have interfered seriously with their plans.

Lesson:

It is unwise for a Commander to base his plans solely on his conception of the enemy intentions, as often the enemy will do something else. It is wiser for the Commander to follow the method of capabilities and to base his plans on those enemy capabilities which may adversely affect his plans, and to list them in their order of greatest danger to him.

6. Weather played a prominent part in this operation and seriously affected the outcome. TF 17 in attacking both TULAGI and the SHONO was protected by the bad weather to the south. However, in the carrier battle on May 8th TF 17 was in clear weather and hence suffered heavily in the air exchange between the carrier task groups. In this case the Japanese carriers had the advantage of weather. However, this use of the weather appears to have been purely fortuitous. There is nothing which indicates that any Commander on either side planned to use the weather as a naval aid to security, or that he recognized its value until some time after the action.

Lesson:

Often the most advantageous position during an air action is obtained by that force which is able to operate within or under the cover of a frontal zone. This concept appears valid today. Therefore, every effort should be

*Sound Military Decision, U.S. Naval War College, 1942. P.73.

made by a Commander to keep himself informed on the latest current and long range weather forecasts for his contemplated operating area, and to evaluate this information to his existing strategical and tactical situation to insure that he is able to take advantage of it and to deny such advantage to the enemy.

7. Searches conducted from land bases and by seaplanes are effective in searching an area when there are a sufficient number of suitable planes and pilots available to accomplish the search, and when the weather permits such searches to be thoroughly done. This was shown in certain areas, notably, on the Allied side, in the vicinity of PARAU where continuous patrol was maintained from PORT MORESBY, and on the Japanese side, in the vicinity of the LOUISIAD Archipelago, where a continuous patrol was maintained from DEBOYNE, LAE and PARAU. However, in all other areas these searches did not appear to be effective, and the lack of definite information finally forced the commanders of the carrier task forces on both sides to use carrier based planes for search.

Lesson:

Commanders of naval task forces should not place their security on searches made by shore based planes unless they are confident that such searches are adequate. They must keep this matter under constant study, and must make any additional searches which appear necessary, as the shore based searches become less efficient.

8. It was noted that the searches conducted by the patrol plane unit operating from the TANGIER at NOUMEA were designed to cover the area from NOUMEA to the southeastern border of SoWesPac. Thus, when TULAGI fell, a large unsearched area was unveiled which permitted the Striking Force to pass through undetected. What restrictions had been placed by ComSoWesPac upon outside friendly forces operating in his area are not known, but it is apparent that CTF 17 felt restricted in his searches to the border indicated.

Lesson:

Area border lines should not be so rigid as to exclude outside friendly forces from operating in that area if necessary.

9. Shore based aircraft, although they helped by providing strategical information on enemy dispositions and concentrations, and although they also helped by bombing shore installations, especially at PARAU and LAE, and by almost daily attacks on shipping, failed to furnish any tactical information

and attack support on May 8th. Had attack support been furnished by the shore based aircraft on May 8th, after ComSoWesPac had been informed by CTF 17 of the location and disposition of the Striking Force, the carriers of that force might have suffered more damage.

Lesson:

Shore based aircraft and fleet units must be coordinated by intensive combined training to better support one another's operations. There seemed to be an almost complete lack of understanding of this vitally important problem by the Army Air Forces. This was in a large part due to the lack of combined training in these matters, although it was also due to a shortage of suitable planes and the remoteness of Australian bases, which necessitated staging attack and search planes through HORN ISLAND and PORT MORESBY.

Adequate air support, both reconnaissance and attack, by land and tender based aircraft for naval operations cannot be stressed too strongly. Without efficient and reliable support of this nature, naval forces are at a serious disadvantage. These air support units, when under naval control, should co-operate directly with the naval forces by scouting both strategically and tactically. They should also coordinate their attacks by doctrine against the enemy sea borne forces in such a manner as to directly support the objectives of the Naval Forces. They should locate enemy task forces at the earliest possible time, commensurate with the range of the search planes available. As opposing task forces approach each other, the search and shadowing activities should be intensified, and a continuous flow of information should be furnished directly to the Task Force Commanders. Radio equipment for this purpose should be such as to insure prompt receipt of this information, whether it be direct or by intercept method.

Where the air support units are not controlled directly by the Fleet or Task Force Commander, the responsible Area or Theater Commander should provide for thorough search coverage and direct communications between the air support units and the surface forces concerned.

10. Each of the three large Japanese patrol seaplanes that made contact with TF 17 during the operations in the CORAL SEA was promptly intercepted and shot down by elements of the combat air patrol from that force. These Japanese planes were not equipped with radar and had to close to visual range to make and develop each contact. Their slow speed and lack of sufficient protective fire power made them easy prey for the Allied fighter planes.

Lesson:

Fast long range reconnaissance land planes, equipped with the most advanced long range radar and with adequate armament for self-protection,

are preferable for reconnaissance operations, which are designed to develop and track a contact. The large seaplane is not as fast, nor as maneuverable, nor as well armed for this purpose as the large land plane.

Lack of suitable airfields from which long range land planes may conduct long range air scouting designed to cover an area within which a naval force is operating, may require the use of long range seaplanes. If the seaplanes are used to undertake this reconnaissance, they will in all probability suffer greater losses than would land planes in similar operations.

11. The Allied carrier pilots launched non-coordinated attacks against the enemy in the early days of the Battle of the CORAL SEA. However, they improved rapidly in this regard, so that on May 7th and 8th all attacks were generally well coordinated within the individual Air Groups involved.

Lessons

The test of battle is the greatest crucible of war. Even small actions, such as that at TULAGI and the attack on the SHOMO, are invaluable in the training of personnel, and usually greatly improve both the combat efficiency and morale of the forces so engaged.

12. The YORKTOWN apparently launched her air attack group for each strike mission, without designating an officer to exercise tactical command of the group. The Air Group Commander was retained in YORKTOWN as Fighter Director Officer. The LEXINGTON Air Group Commander accompanied the LEXINGTON air attack group in each of the actions in which it participated. When both the YORKTOWN and LEXINGTON air attack groups were attacking together, no overall Task Group Strike Commander was appointed to assign targets, to designate the order of attack, to prescribe the interval between groups and, in general, to coordinate the effects of all attack units. This resulted in an over-expenditure of ammunition for the damage inflicted, and did not produce the damage that might reasonably have been expected from the number of sorties flown.

Lessons

A flight of planes from any one carrier, launched for a strike mission, should have a designated Flight Leader in tactical command of the various elements of the flight. When strike planes from more than one carrier in a Task Group are launched for the same mission, a Task Group Strike Commander should be designated to exercise over all tactical command of all participating air units from his Task Group. A Task Group Strike Commander should be furnished with adequate fighter escort. He should not unnecessarily enter directly into any action which detracts from his primary responsibility as Officer in Tactical Command.

13. The tremendous advantages inherent in radar were fully apparent. Had the Allied forces not had radar, there were several occasions, notably on the evening of May 7th and the morning of May 8th, when the Japanese might have attacked the Allied task groups by surprise. Certainly, radar gave notice of snoopers and of attacking planes; it guided Allied planes to their bearing and interception; it gave the Commander a sense of reasonable security against surprise; it was invaluable. The Japanese, on the other hand, being entirely without radar, were forced to operate with more simple devices. The fact that they did as well as they did under this terrific handicap is a high tribute to their courage and training.

Lesson:

Forces not equipped with radar have an almost insurmountable handicap to overcome. Every effort should therefore be made to insure that the Commander is not forced into action against an enemy better equipped in technological items.

14. TF 11 and TF 17 under the command of CTF 17 fueled, in a very limited area, for about 50 hours. During this time these two task forces maneuvered at slow speed and crossed and recrossed one another's tracks. While fueling in this loose manner, an enemy submarine was sighted about 15 miles away. CTF 17 apparently decided that he was not in any immediate danger, for he continued fueling, and did not change the task group fueling area.

Lesson:

Carrier task forces and other forces vulnerable to submarine attack should not remain in submarine areas for long periods unless it is absolutely necessary to do so in order to support the basic plan. When practicable, they should change their operating areas frequently and radically from day to day.

15. It appears that the great advantages which TF 17 possessed, because of its radar and its fighter director system, was not exploited to the fullest advantage in the action of May 8th. The combat air patrol was not vectored to intercept the incoming raid until too late, and when it was finally so vectored, it was sent in inadequate strength and at too low an altitude.

Lesson:

When a bogey is detected by radar, it is important that defending fighters be vectored out to intercept at the earliest possible moment, consistent with plane performance, reliable communication and radar information.

The speed of combat aircraft is such that the elapsed time between the initial detection and the arrival of the enemy attack over the formation does not permit delay. The earlier the fighters are vectored on an interception, the greater should be the distance of the interception from the formation. This means that the fighters should be able to make more runs on an enemy group, and that the chance of breaking up the attack before it reaches the formation should be improved.

When fighters are vectored out to intercept a raid, the greater number of them must be placed high enough to give them the altitude advantage over the probable altitude of the enemy group.

A raid can be broken up much more effectively if the combat air patrol is vectored out to meet the raid in adequate strength, rather than in succession in smaller inadequate groups. Furthermore, the use of larger groups reduces confusion of the radar picture.

The number of fighters available in a carrier or in a carrier group must be sufficient to provide reasonable protection for the force and, at the same time, to permit a reasonable number of fighters to accompany the air attack group as its fighter escort on its attack on the enemy force. The allowance of 18 fighters for the YORKTOWN and the LEXINGTON was not sufficient to meet this requirement, and as a result of the experience gained in the Coral Sea this allowance was increased to 27 fighters for each carrier.

16. Recognition and identification of both ships and planes was poor on both sides, and was responsible for decisions which reacted adversely on the Commanders. Among the most glaring of these errors were--(a) the Japanese error in mistaking the NEUSHO and SIMS for a carrier task force, and thereby causing the Striking Force to expose its presence, as well as to expend its air resources unnecessarily, (b) the Army Air Force error in bombing TG 17.3, Support Force, a friendly force.

Lessons:

Correct recognition and identification is of extreme importance. Every effort should be made to train personnel in this matter so that the Commanders plan may not be adversely affected by mistakes, or a friendly plane be shot down, or an air attack be allowed to gain an advantageous position without being subjected to attack by guns and planes.

17. Neither the Japanese nor the Allies made any arrangements for the replacements of either pilots or planes lost in battle or through operational failures. In the case of the Japanese, this was a major error and contributed in a large way to their strategical defeat. They did transfer 18 Zero fighters to RABAUl on May 3rd and 4th, but there does not appear to have been any stock-

pile of carrier based types there or anywhere else in the area, with the result that after the final carrier action there appeared to be no plane replacements available.

Lesson:

Prior to any operation adequate logistical arrangements for the immediate replacement of planes and pilots should be made.

18. Logistics, particularly fuel requirements, are of vital importance in operations of this nature. The Japanese evidently had discovered this fact in their operations to capture the Philippines and the Netherlands Indies. They seemed to have well considered plans for fueling their various units as they proceeded on this operation. They had established in certain key locations fueling stations which were easy of access, some of which were apparently protected against bombing—note the stone recess at SHORTLAND Island—and they also moved oilers with their units. In this connection, one oiler was reported with the Striking Force, and a fueling convoy was with the Port Moresby Invasion Force. Even with these arrangements they encountered fueling difficulties.

The Allies, on the other hand, were forced to oilers only, and were limited to about one per task force. The loss of more than one oiler could have reacted most adversely on the operations of TF 17, and the possibility of loss was a source of constant worry to CTF 17. It was for that reason, in part, that he was constantly refueling his command from the oilers.

Lesson:

Naval units, which have their freedom of action restricted by a limitation in their fuel consumption, may be unable to accomplish adequately their assigned tasks. Therefore it is essential that every effort be expended to insure that adequate fuel is available in close by, but relatively safe, areas for any naval forces engaged in combat operations. This also applies to other logistical requirements, such as ammunition and food.

19. Although not mentioned in the body of this analysis, two dispatches were received during the action, one from COMINCH relayed by CINCPAC, in a cipher which CTF 17 did not hold; the other CINCPAC, marked operational priority in the same cipher.* No means of breaking this cipher were available. The contents of these dispatches was not made available to CTF 17 until after the action, when CINCPAC, upon request, furnished a translation. The information contained therein, could well have been used by CTF 17.

Interview of Lieut. Commander C.C. Ray, USN, Communication Officer, YORKTOWN, in Bureau of Aeronautics, July 15, 1942.

Lesson:

Every effort should be made to insure that dispatches are sent in cryptographic systems which are held by the addressee. On the other hand, Commanders should ensure prior to departing on an operation that they hold their complete allowance of codes and ciphers.

20. Allied carrier formations during this action consisted of one or two carriers within a double screen, with the cruisers stationed on an inner screen and the destroyers on an outer screen as supporting ships. In the case of a single carrier formation, the cruisers were generally stationed on circle 1.5 (1500 yards), and the destroyers on circle 2.5 (2500 yards) from the carrier at the center. In the case of a two-carrier formation the carriers were on circle 1.5 (1500 yards) from the center; the cruisers were on circle 3 (3000 yards) from the center, and the destroyers on circle 4 (4000 yards) from the center. The nearest a cruiser could be to the nearest carrier would therefore be 1500 yards, and the nearest a destroyer could be would be 2500 yards. The Allied practice was for the support ships to maneuver with the carrier(s). The Japanese practice appears to have been somewhat similar to the Allied practice, with two exceptions: (a) the Japanese supporting ships appear to have been about twice as far from their carrier(s) as were the Allied supporting ships, and, (b) the Japanese supporting ships maneuvered individually without too much reference to the carriers. It is difficult to say from this battle which method was preferable—maneuvering or gunfire. Certainly the loose 8000 yard Japanese screen of 4 cruisers defending the SHOHO was ineffectual, and permitted the SHOHO to be readily destroyed. However, on May 8th the Japanese pilots did much greater damage to Allied carriers than Allied pilots did to the Japanese carriers. The ratio was two bomb hits, two near misses, and two torpedo hits on the LEXINGTON, plus one bomb hit and 12 ineffective near misses on the YORKTOWN against 5 bomb hits and 8 ineffective near misses on the SHOKAKU. The success of the Japanese on May 8th appears to have been partially due to the bad weather which covered the Japanese carriers, and partially to the greater experience of the Japanese torpedo plane pilots and faster torpedo planes. The bombing pilots appear about equal.

Lesson:

Anti-aircraft formations should be based on an analysis of all pertinent factors. The fact that the Japanese chose to have their ships maneuver independently and not rely primarily upon gunfire is a clear indication that the Japanese thought that their best defense lay in maneuvering. It should be apparent that by circling independently, as they did, they destroyed their AA setups and reduced their gunfire accuracy. The Allies, on the other hand, believed more in gunfire than in maneuvering and, although they did maneuver,

and by so doing did affect their AA setups, they endeavored to keep the formation together and to maneuver as a unit. By such measures they were able to maintain a concentrated volume of fairly accurate fire. Part of this gunnery confidence was based on radar, which was not available to the Japanese at the time.

21. Both the Allied and Japanese aviators were on occasions inclined to be highly optimistic in their claims of damage inflicted on enemy ships and planes. They had a tendency to exaggerate the effectiveness of their attacks. This exaggeration appears to have increased as the enemy defenses increased. For example, the Allied claims of damage inflicted at TULAGI, although the identification of enemy ships and types was in error, appear to have otherwise been correct; their claims of damage inflicted against the SHOKO appear to have been approximately correct. However, their claims of damage inflicted against the Striking Force appear to have been markedly incorrect. This was apparently because of the adverse effect an increase in fighter defense, bad weather, and an increased AA defense had on the mental attitude of the attacking pilots.

The Japanese claims against the NEOSHO and SIMS appear to have been correct. However, their claims against TF 44 on May 7th were fantastic, and their claims against TF 17 on May 8th were almost equally so. This appears to have been because of the AA defense in the case of TF 44, and of the AA defense and the fighter and SRD plane protection in the case of TF 17.

Lessons:

Where aircraft are given the responsibility for attacking strongly defended task forces or bases, the accuracy of the pilots observations as to the effectiveness of their attack seems to vary directly with an increase in the intensity of the defenses, i.e., strong defenses means less accurate observations. Commanders in evaluating such observations must do so with caution, being guided in part by the seriousness of the opposition encountered and by the experience and responsibility of the pilots. This stresses the need for obtaining actual proof of damage inflicted by the use of photographs taken during and after the attack.

COMBAT APPRAISAL
of the
JAPANESE CARRIER TASK FORCE COMMANDER

Rear Admiral Tadaichi Hara, I.J.N.

[REDACTED]

Rear Admiral Tadaishi Hara
Commander Striking Force

Rear Admiral Hara presents many of the complex person characteristics which so often appeared among Japanese commanders throughout the war.

He appears to have been an enthusiastic, competent commander of a carrier striking force so long as the situation remained favorable, and in accordance with the plan, or when he was faced with immediate and clear cut danger. However, once he had found himself in what he deemed to be an unfavorable military situation and thereby appeared to suffer an unexpected loss of "face", as when the SHOHO was sunk, he struck out almost blindly, and consequently made several what appear to have been very serious errors. As an example, the launching of the 27 attack planes against TF 17 without knowing the exact location of that force, and under poor weather conditions, caused the loss of 20 planes and, possibly, of as many pilots under conditions where both were vital to success and where both were irreplaceable.

Although he allowed his task force to become separated on the morning of May 8th, it must be remembered that it appears to have been Japanese practice to operate the carrier task groups rather loosely. He, apparently, did not think, at the time, that the operations then underway for launching planes were inconsistent with Japanese doctrine.

Like Rear Admiral Fletcher, he seemed to accept the statements of his aviators without hesitation--note the incorrect reports which brought on action against the NEOSHO and SIMS--note also the reports of the battle on May 8th, where the aviators reported both Allied carriers sunk. This ready acceptance of his aviator's reports appears to have been partially based upon over-confidence. He seemed to feel that his aviators were superior to those of the Allies; hence their reported sinking of both the YORKTOWN and SARATOGA was not unexpected.

In supervising his planned action he relied heavily on land based aircraft to keep him provided with information, and he appeared to feel that not receiving information indicated that all was well. Actually, there seem to have been few searches in the east central part of the Coral Sea, and, therefore, Commander Striking Force was relying on searches which were not being adequately conducted. Whether he knew this or not is not apparent.

Like Rear Admiral Fletcher, he was eager for action and sought it, sometimes, apparently, without determining whether the time for action was correct or not. He launched his attacks boldly, and effectively, by virtue

of which he gained the ascendancy in the main carrier action on May 8th.

On the other hand, he did not appear to best advantage when, after the battle, he had decided that both Allied carriers had been sunk. He appears to have considered that his share of the operation had been completed, and at the time made no further effort to destroy the Allied ships remaining afloat. He appeared to be content to rest on the laurels of partial success rather than to pursue the enemy to annihilation. This indicates a frailty in his military character, a lack of will to "all out" victory. Such an attitude was not conducive to future Japanese success.

APPENDIX - I

ORGANIZATION OF JAPANESE 4TH FLEET FOR THE PORT MORESEY OPERATION,

MAY 1942

TASK ORGANIZATION

Commander 4th Fleet in CL KASHIMA at RABAU

V. Adm. INOUE, Narimi

(a) TULAGI Invasion Force

R. Adm. SHIMA, Kiyohede

(1) DesRon 19

OKINOSHIMA
KIKUZUKI
YUZUKI

CM
DD
DD

(2) 14th Minesweeper Division

TAMA-MARU
HAGINA-MARU
NOSHIRO-MARU
Nos. 1 and 2 special duty
Minesweepers

XAM
XAM
XCL
2 AMC

(3) 56th Subchaser Group

TAMA-MARU No. 8
KAGA-MARU No. 3
AZUMAYAMA-MARU
TAKAHAE-MARU

XPC
XPC
XPC
XPC

(4) Base Units

Part of KURE 3rd Special
A part of the 7th Construction Section
Two 8 cm. AA guns of 3rd Base Unit
One 13 mm. Machine Gun of 3rd Base Unit
Two 8 cm. Guns (AA) of the 8th Base Unit
(Weapons Only)

(5) Covering Force

AOBA (F)
KAKO
KINUGASA
FURUTAKA
SHOHO
SAZANAMI

V. Adm. GOTO, Nobuji

4 CA
1 CV
1 DD

(b) PORT MORESEY Invasion Force-R. Adm. KAJIOKA, Sadamachi

- | | | | |
|--|---|---|--------------|
| (1) 6th Destroyer Squadron | " | " | " |
| YUBARI (F) | | | 1 CL |
| OITE | | | |
| ASANAGI | | | |
| MUTSUKI | | | |
| MOCHIZUKI | | | |
| YAYOI | | | |
| UZUKI | | | 6 DD |
| TSUGARU | | | 1 CM |
| (2) Minesweeper 110 Unit | | | 1 AM |
| (3) Transports | | | |
| AZUMAYAMA-MARU | | | |
| GOYO-MARU | | | |
| AKIBAYAMA-MARU | | | |
| SHOKA-MARU | | | |
| NAGAWA-MARU | | | |
| YUJIMA | | | |
| DAINI FUMI-MARU | | | |
| KAKAWA-MARU No. 3 | | | |
| MOGANIKAWA-MARU | | | 9 AP, AK, AV |
| (4) Base Units (embarked) | | | |
| Greater portion of KURE 3rd Special Unit | | | |
| 10th Construction Section | | | |
| Four 12 cm. AA guns of the 8th Base Unit | | | |
| Two 8 cm. AA guns of the 8th Base Unit | | | |
| Four 15 mm. Machine Guns of the 8th Base Unit | | | |
| Two 8 cm. guns of the 4th Base Unit | | | |
| One portion of the 8th Base Unit-Communication | | | |
| Personnel (PORT MORESBY) | | | |
| Transportation Section | | | |

(c) SUPPORT Force

R. Adm. MATSUYAMA, Mitsuji

- | | | | |
|--------------------------|---|---|--------|
| (1) 18th Squadron | " | " | " |
| TENRYU (F) | | | |
| TATSUDA | | | 2 CL |
| HIJIRIKAWA-MARU | | | |
| KAMIKAWA-MARU | | | 2 AV |
| (2) 5th Gunboat Division | | | |
| HIUMI-MARU | | | |
| KEIJO-MARU | | | |
| SHOEI-MARU | | | 3 XAVP |

(c) SUPPORT Force (Continued)

(3) 14th Minesweeper Division

HAGINU-MARU

XAM

NOSHIRO-MARU No. 2

XCL

(4) Base Units

One portion of the KURE 3rd Special Unit

One portion of the Communications Personnel
of the 8th Base Unit

(d) STRIKING Force

V. Adm. HARA

(1) 5th Squadron

V. Adm. TAKAGI, Takeo

MYOKO (F)

HAGURO

2 CA

(2) 5th Carrier Division

SHOKAKU

ZUIKAKU

2 CV

(3) 27th Destroyer Division

SHIGURE

YUGURE

ARIAKE

SHIRAURO

4 DD

(4) 7th Destroyer Division

USHIO

AKEBONO

TCHO-MARU

2 DD

AO

(e) SUBMARINE Force

Capt. IWAGAMA, Mitsunage

RO 33

RO 34

2 OSS

I-22

I-24

I-28

I-29

4 SS

(f) SUPPLY Group

IRO

HOYO-MARU

MIMUROYAMA-MARU

3 AO

(g) DEFENSE UNITS of the BISMARCK AREA

(1) 8th Base Unit R. Adm. KANAZAWA, Masao
8th Communication Unit
8th Base Submarine Unit
81st Garrison Main Unit of Rabaul
5th Gunboat Group
SHIZUMI-MARU 1 PG
56th Subchaser Group
KOTBUKI-MARU No. 5 1 PG

(2) Air Units of 11th Air Fleet Based
in the BISMARCK Area R. Adm. YAMADA, Sadayoshi

25th Air Flotilla
TAIWAN Air Unit
FOURTH Air Group
MOTOYAMA Air Unit
YOKOHAMA Air Unit

(h) PORT MORESBY Invasion Army Units

Maj. Gen. HORII

South Seas Detachment
144th Inf. Regiment
1 Company of the 55th Cavalry Regiment
1st Bn of the 55th Mountain Gun Regiment
1st Company of the 55th Engineer Regiment
2nd Company of the 55th Transportation Regiment
1st Company of the 47th Mobile AA Battalion
In addition 6 Army Transports.

APPENDIX II

ORGANIZATION OF TASK FORCE SEVENTEEN

TASK ORGANIZATION

Commander Task Force Seventeen in YORKTOWN

(a) <u>(17.2) Attack Group</u>	R. Adm. T. C. Kinkaid	
(17.2.1) MINNEAPOLIS NEW ORLEANS		2 CA
(17.2.2) ASTORIA, CHESTER, PORTLAND	R. Adm. W.F. Smith	3 CA
(17.2.4) PHELPS, DEWEY, FARRAGUT, AYLWIN, MONAGHAN	Capt. A. R. Early	5 DD
(b) <u>(17.3) Support Group</u>	R. Adm. J.G. Grace	
(17.3.1) AUSTRALIA CHICAGO HOBART		2 CA 1 CL
(17.3.4) PERKINS, WALKER	Comdr. F.X. McInerney	2 DD
(c) <u>(17.5) Air</u>	R. Adm. A.W. Fitch	
(17.5.1) YORKTOWN LEXINGTON		2 CV
(17.5.4) MORRIS, ANDERSON, HAMMANN, RUSSELL	Capt. G.C. Hoover	4 DD
(d) <u>(17.6) Fueling Group</u>	Capt. J.E. Phillips	
NEOSHO, TIPPECANOE, SIMS, WORDEN		2 AO 2 DD
(e) <u>(17.9) Search Group</u>	Comdr. G.H. DeBaun	
TANGIER 12 VP		1 AV 12 VP

SUMMARY OF JAPANESE DAMAGE

Ships sunk:

1 Destroyer - KIKUZUKI	May 4
1 Large converted mine sweeper - TAMA MARU	May 4
2 Special duty coastal mine sweepers - No. 1 and No. 2	May 4
1 Small aircraft carrier - SHOHO	May 7
1 Mine layer - OKINOSHIMA	May 11

6

Ships damaged:

1 Mine layer - OKINOSHIMA	May 4
1 Destroyer - YUZUKI	May 4
1 Converted submarine chaser - TAMA MARU No. 8	May 4
Several miscellaneous small craft	May 4
1 Aircraft carrier - SHOKAKU	May 8

4 Plus

Aircraft lost:

From combat or operational causes.

5 Float planes	May 4
2 Float planes	May 7
1 Patrol seaplane, 4 engine	May 5
1 Patrol seaplane, 4 engine	May 7
1 Patrol seaplane, 4 engine	May 8
5 Torpedo planes, 2 motored, land based	May 7
32 Carrier planes	May 7
45 Carrier planes	May 8
*90	

Lost in sinking of SHOHO	
15 Carrier planes	May 7

*105 Total Aircraft Lost

Personnel casualties:

900 (About)

*Does not include losses inflicted by Allied shore based aircraft. Neither does it include planes recovered but so damaged as to make them no longer serviceable. The number of planes in this latter category was probably high. At noon May 9th the ZUIKAKU had only 13 ready for service out of a probable 75 on board.

SUMMARY OF ALLIED DAMAGE

Ships sunk:

1 Destroyer - SIMS	May 7
1 Aircraft carrier - LEXINGTON	May 8
1 Oiler - WEOSEO	May 11

3

Ships damaged:

1 Oiler - WEOSEO	May 7
------------------	-------

1

Aircraft lost:

From combat or operational causes.

5 Carrier planes	May 4
10 Carrier planes	May 7
35 Carrier planes	May 8

*46

Lost in sinking of LEXINGTON

35 Carrier planes	May 8
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35

*81 Total Aircraft Lost

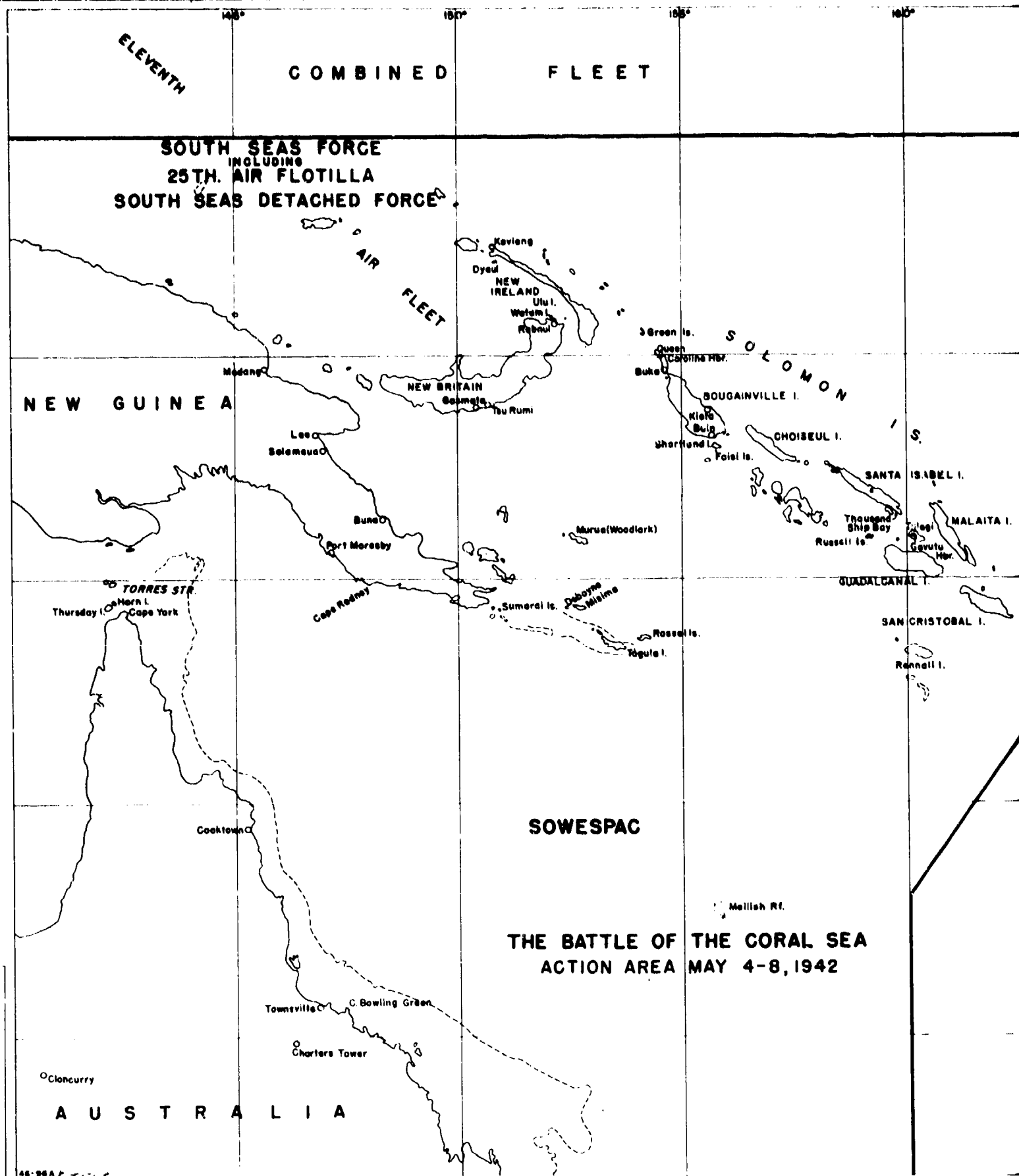
Personnel casualties:

543

*Includes planes recovered but so damaged as to make them no longer serviceable. Does not include losses suffered by Allied shore based aircraft.



A



B

FLEET

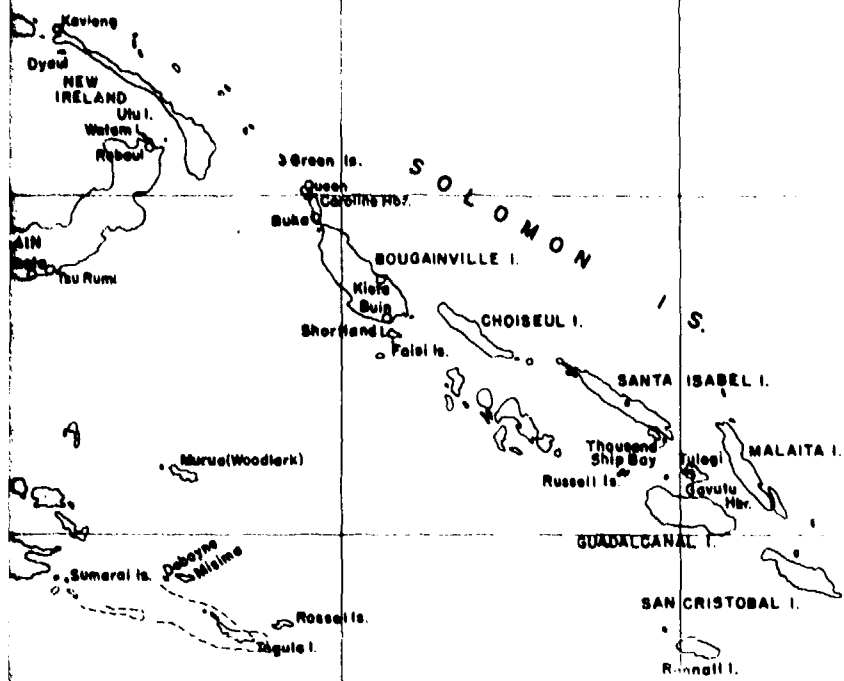
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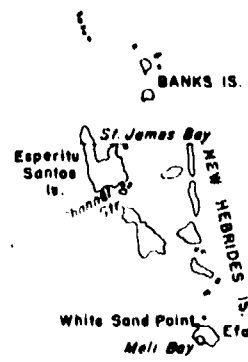
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SOPAC



D.AGRAM-A

SOWESPAC

THE BATTLE OF THE CORAL SEA
ACTION AREA MAY 4-8, 1942

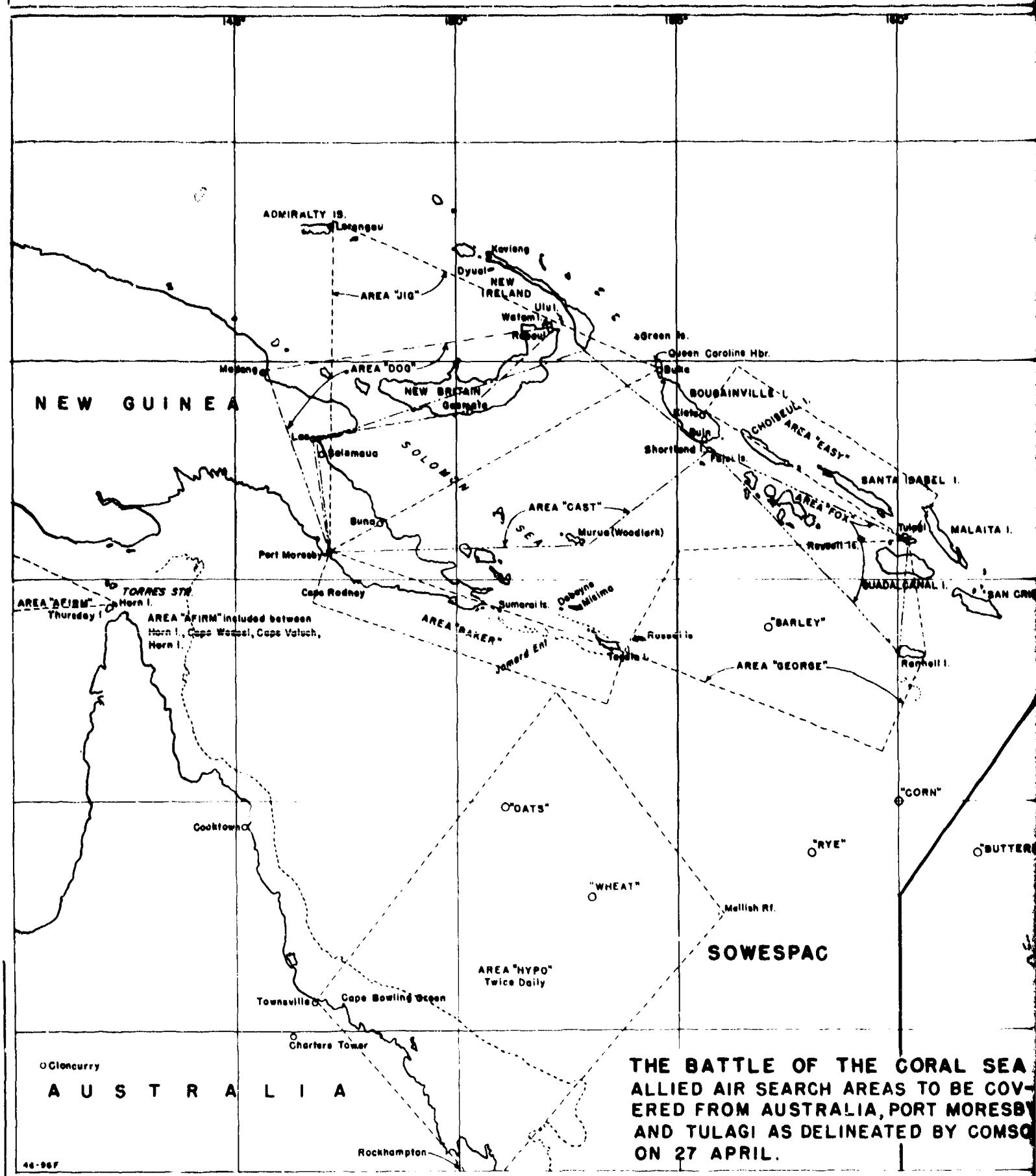
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NEW CALEDONIA

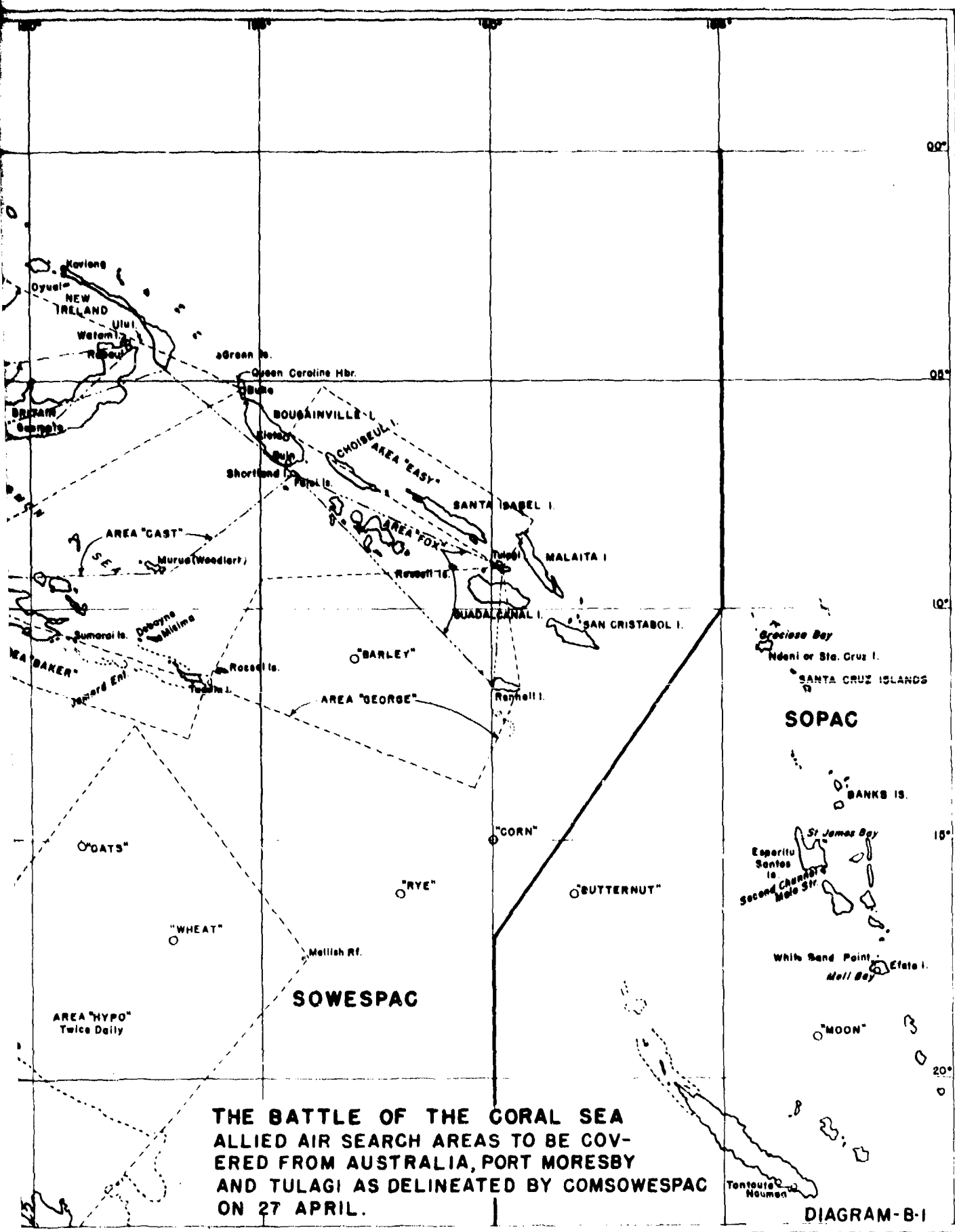
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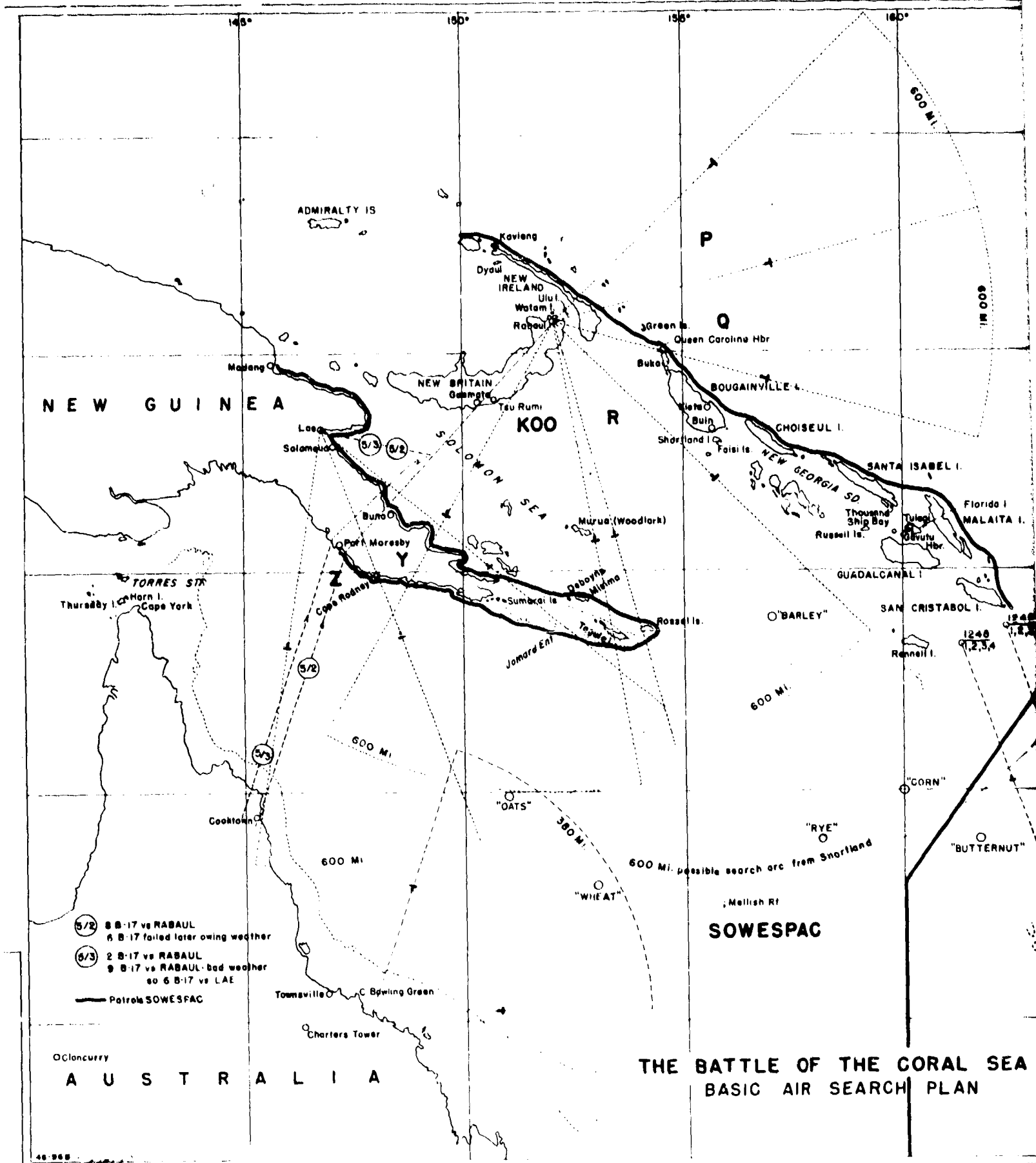


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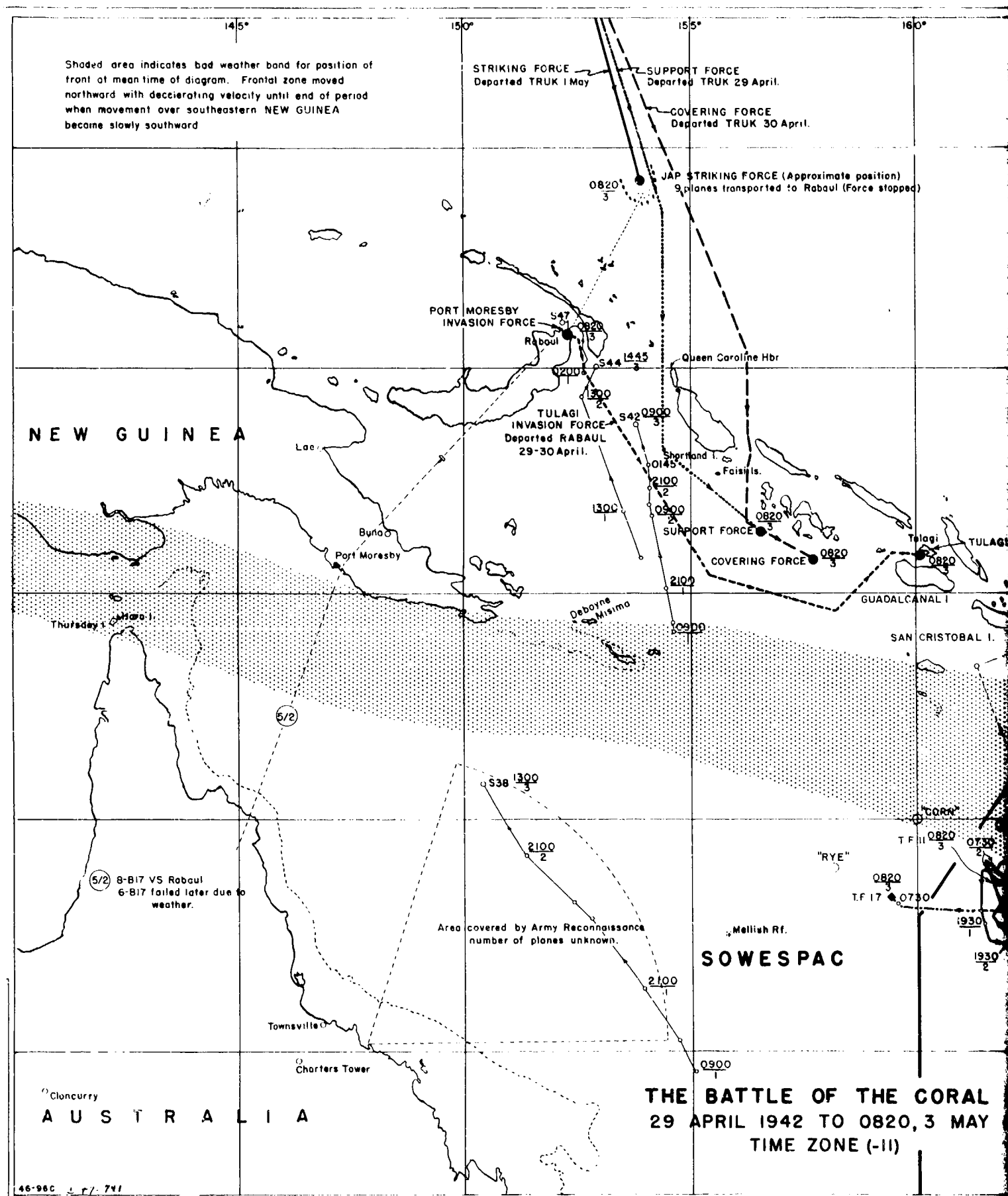


100 a

4 10 15

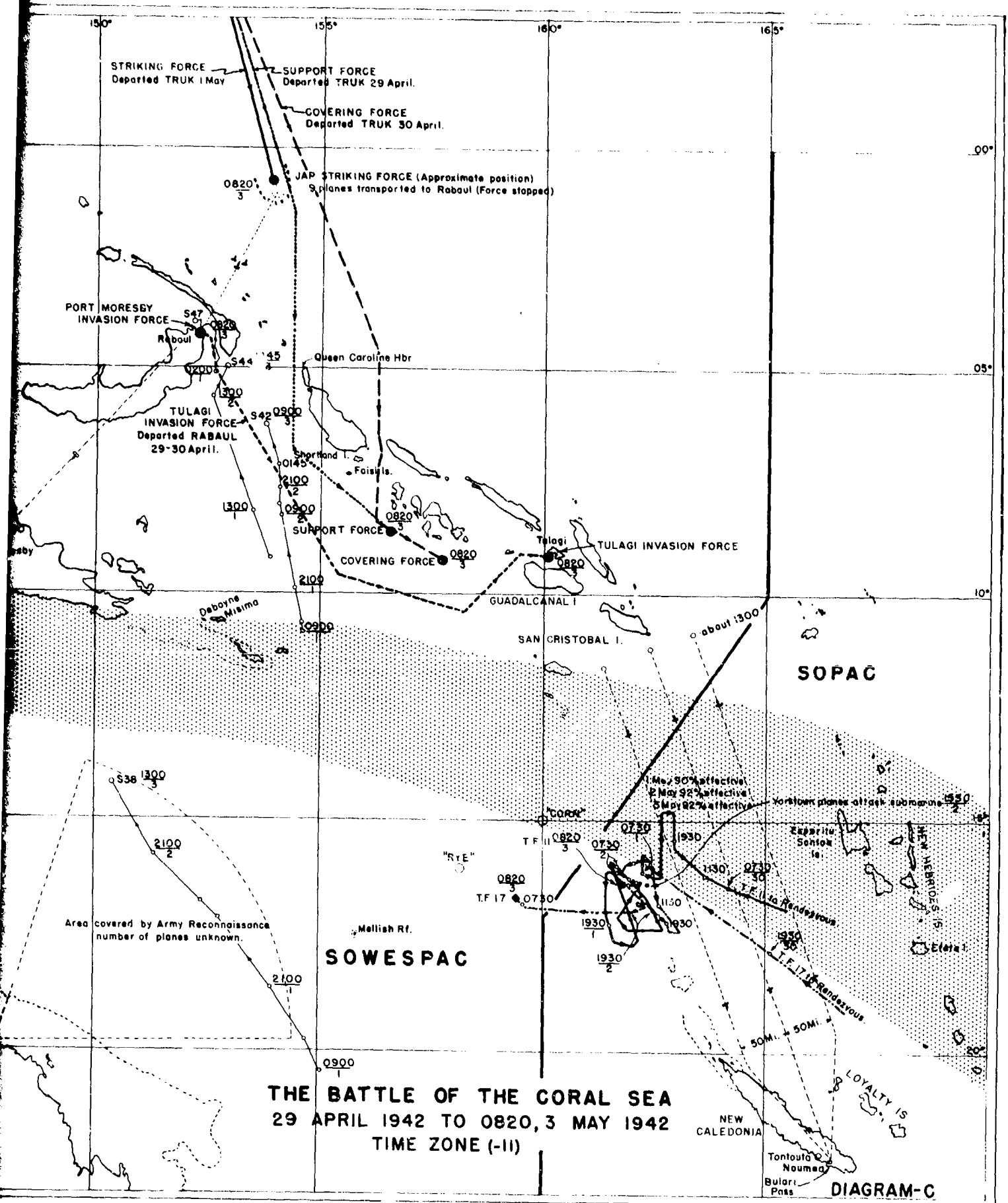


Shaded area indicates bad weather band for position of front at meantime of diagram. Frontal zone moved northward with decelerating velocity until end of period when movement over southeastern NEW GUINEA became slowly southward



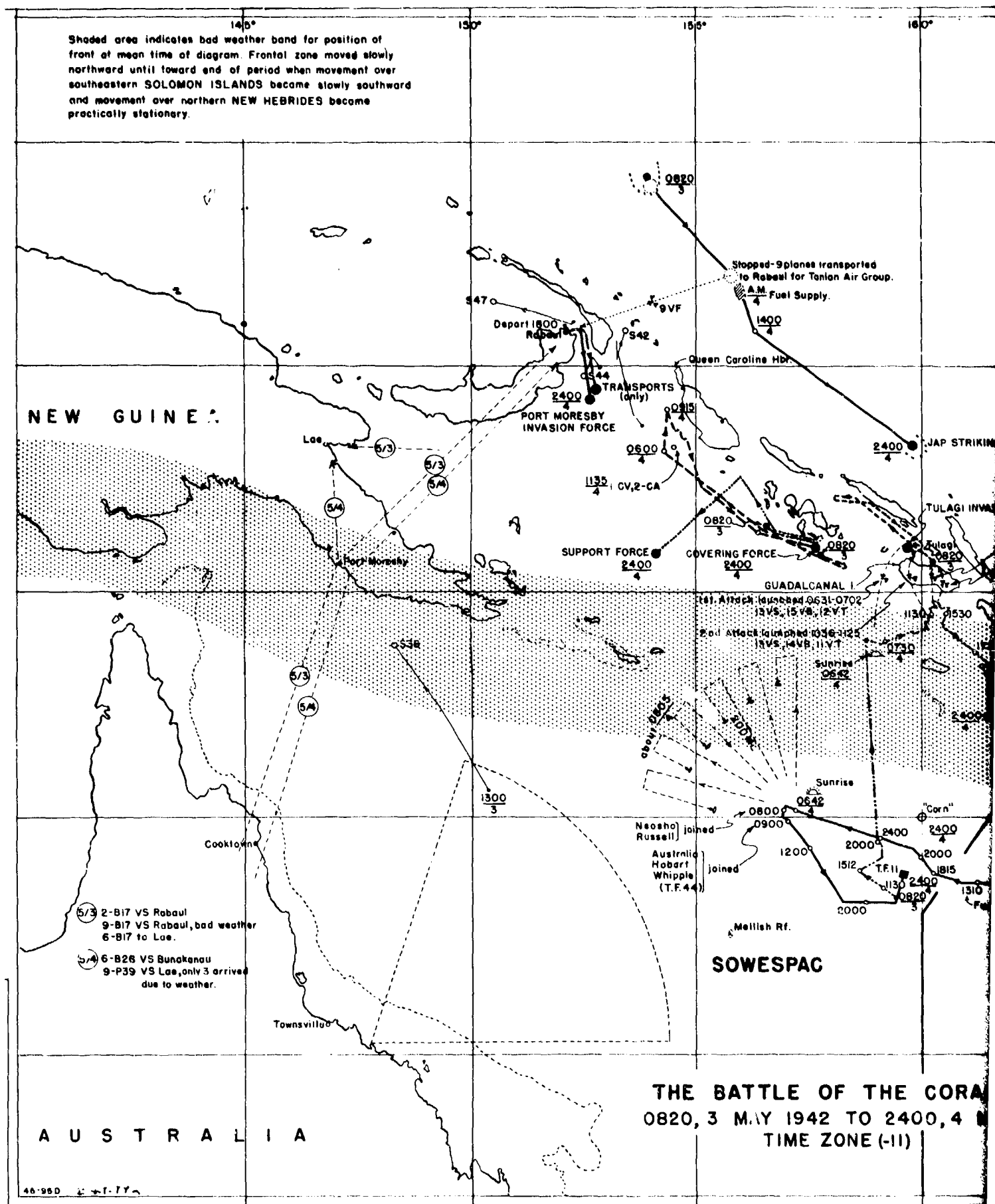
THE BATTLE OF THE CORAL 29 APRIL 1942 TO 0820, 3 MAY TIME ZONE (-11)

B

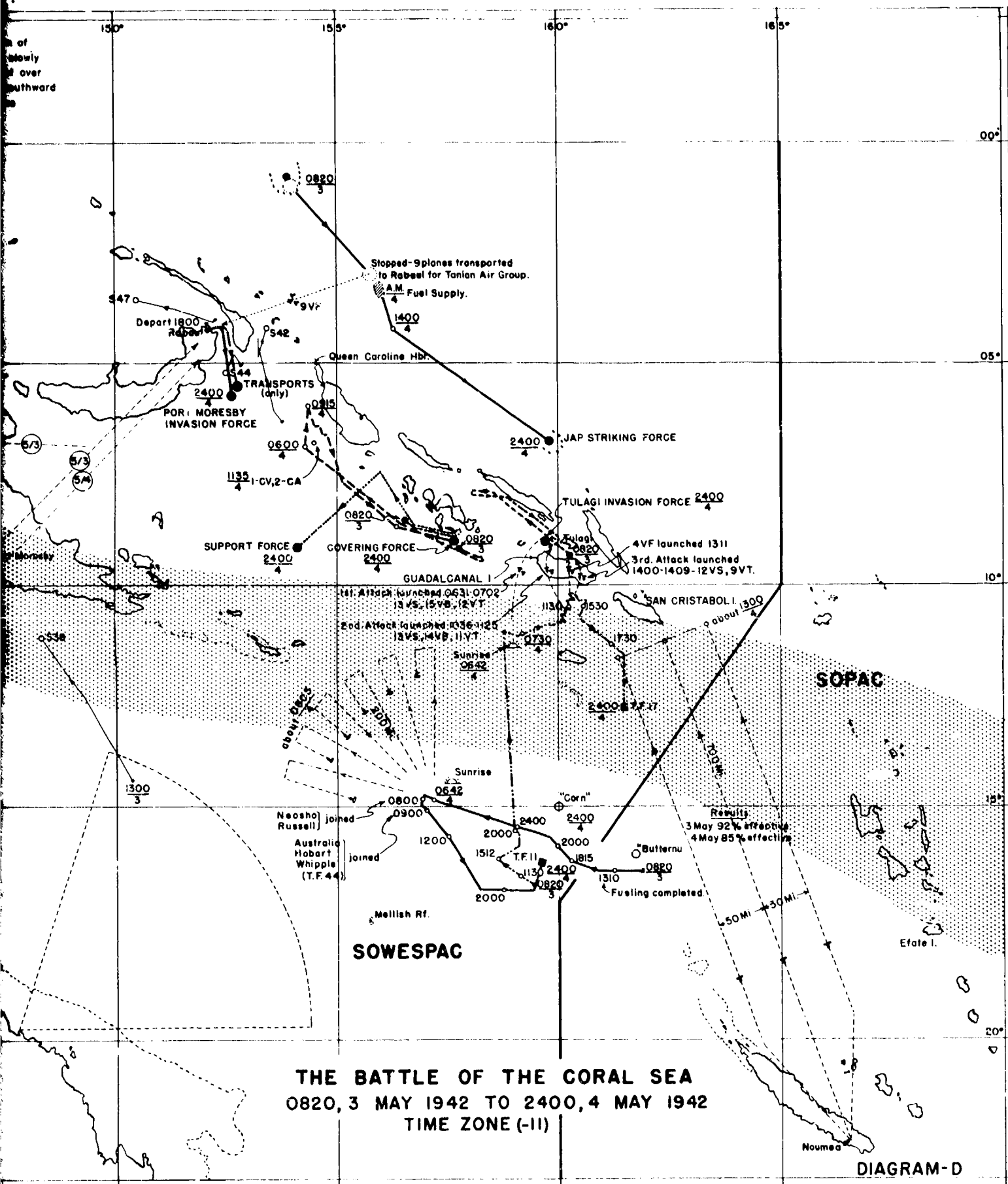


1022

A



slowly
over
southward



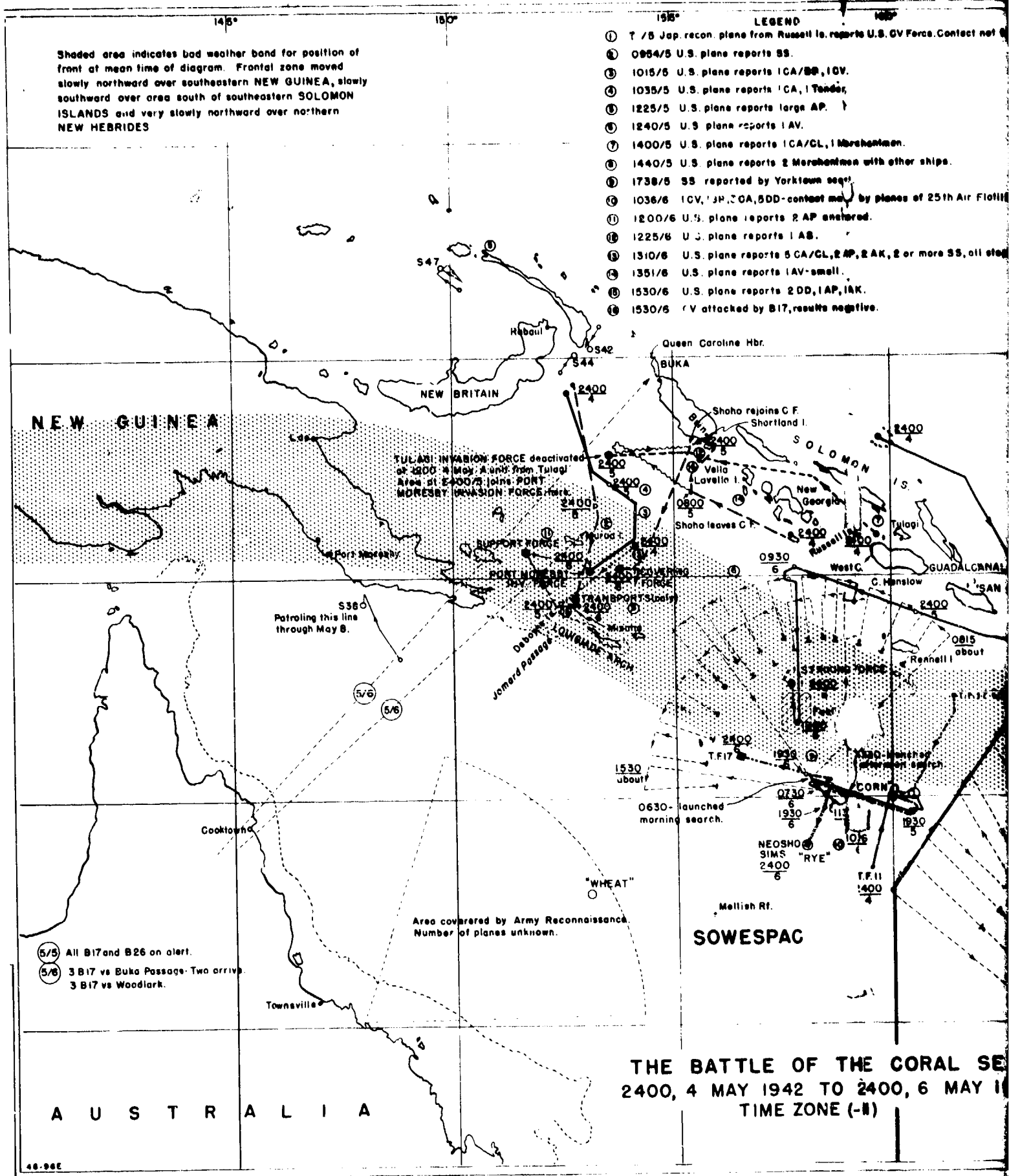
103a

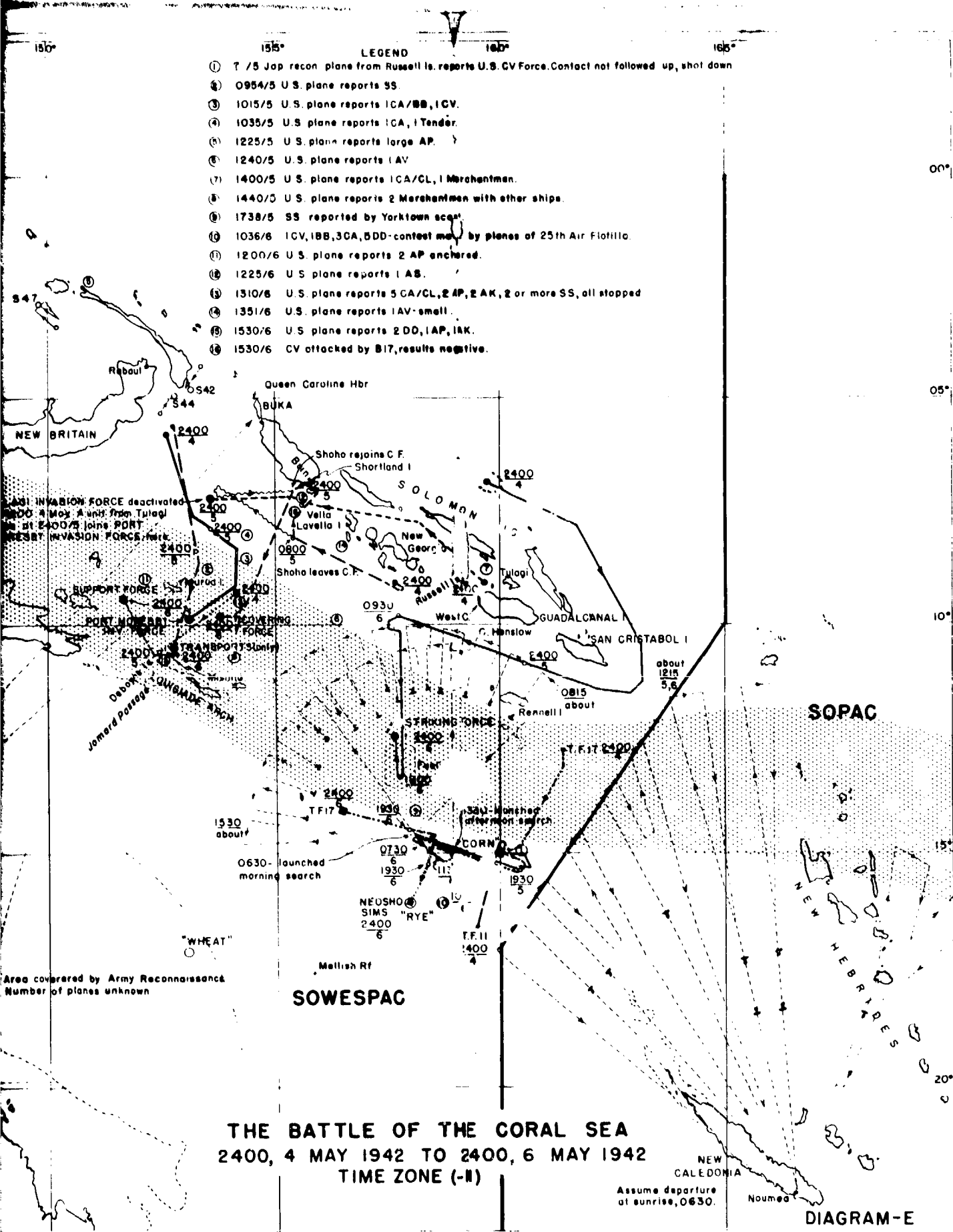
103.

A 1015

Shaded area indicates bad weather band for position of front at mean time of diagram. Frontal zone moved slowly northward over southeastern NEW GUINEA, slowly southward over area south of southeastern SOLOMON ISLANDS and very slowly northward over northern NEW HEBRIDES

- LEGEND
- ① 7/5 Jap. recon. plane from Russell Is. reports U.S. CV Force. Contact not made.
 - ② 0954/5 U.S. plane reports SS.
 - ③ 1015/5 U.S. plane reports 1 CA/BB, 1 CV.
 - ④ 1035/5 U.S. plane reports 1 CA, 1 Tender.
 - ⑤ 1225/5 U.S. plane reports large AP.
 - ⑥ 1240/5 U.S. plane reports 1 AV.
 - ⑦ 1400/5 U.S. plane reports 1 CA/CL, 1 Merchantman.
 - ⑧ 1440/5 U.S. plane reports 2 Merchantmen with other ships.
 - ⑨ 1738/5 SS reported by Yorktown group.
 - ⑩ 1036/6 1 CV, 1 JH, 1 CA, 5 DD - contact made by planes of 25th Air Flotilla.
 - ⑪ 1200/6 U.S. plane reports 2 AP anchored.
 - ⑫ 1225/6 U.S. plane reports 1 AS.
 - ⑬ 1310/6 U.S. plane reports 5 CA/CL, 2 AP, 2 AK, 2 or more SS, all stopped.
 - ⑭ 1351/6 U.S. plane reports 1 AV - small.
 - ⑮ 1530/6 U.S. plane reports 2 DD, 1 AP, 1 AK.
 - ⑯ 1530/6 CV attacked by B17, results negative.

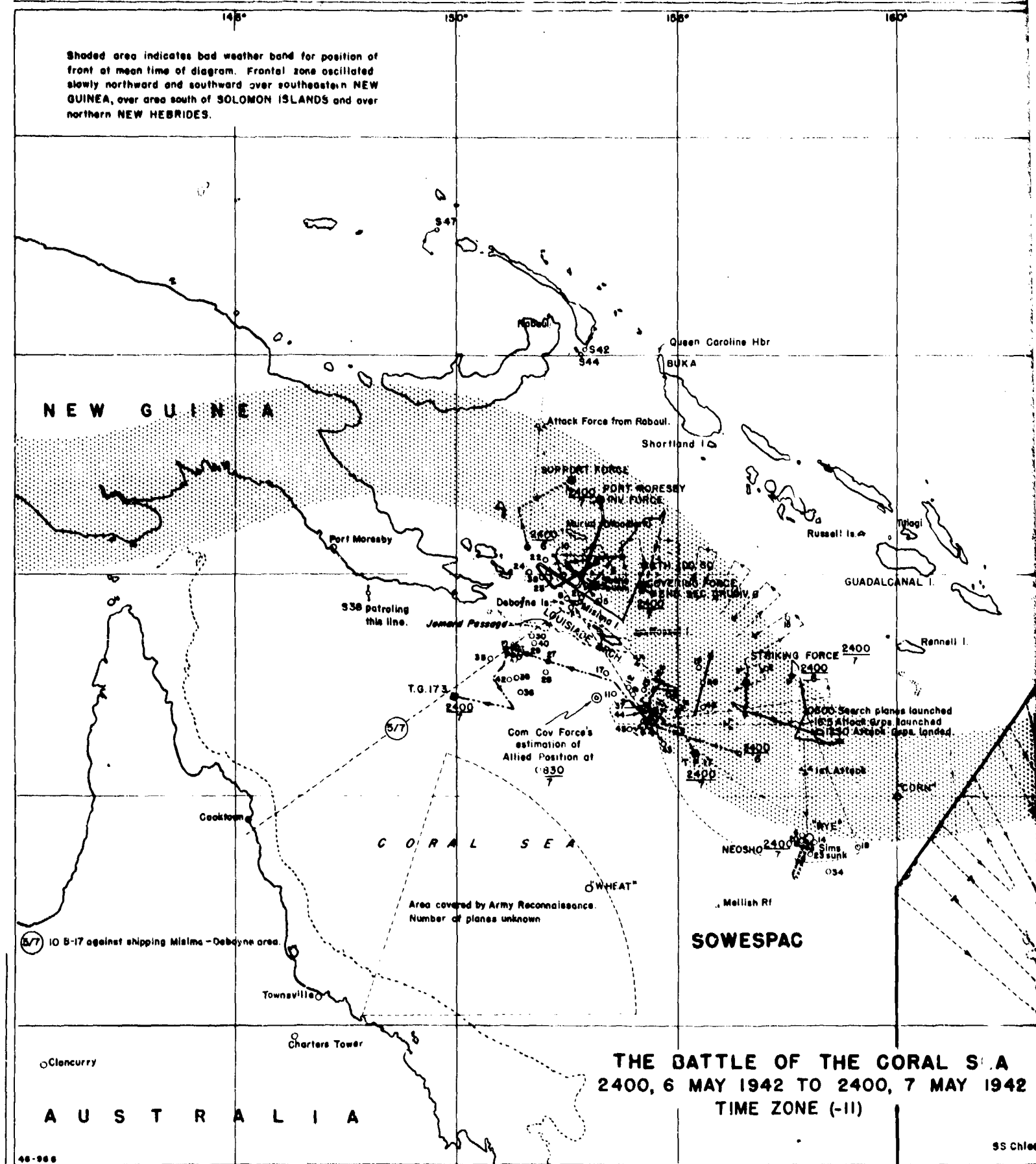




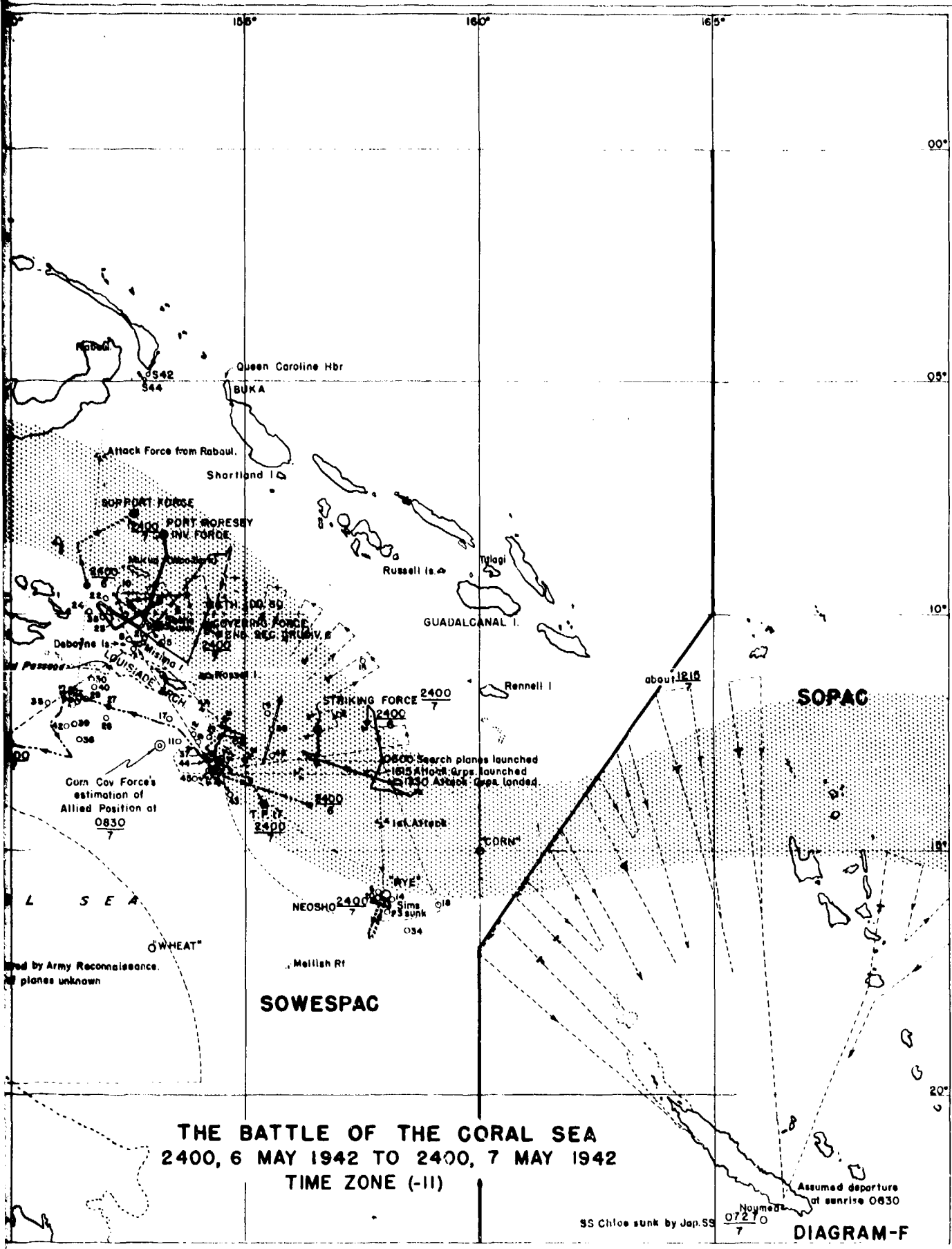
3

104 a

Shaded area indicates bad weather band for position of front at mean time of diagram. Frontal zone oscillated slowly northward and southward over southeastern NEW GUINEA, over area south of SOLOMON ISLANDS and over northern NEW HEBRIDES.



B



CHRONOLOGICAL LIST OF EVENTS NOTED IN
CHART FOR PERIOD MAY 7th

Z-Time (-11)

1. 0619 YORKTOWN launched air search.
2. YORKTOWN scout with sector median 067° returned.
3. 0625 Support Group, Task Group 17.3 plus FARRAGUT, detached.
4. 0645 Sunrise T.F. 17.
5. 0735 Contact by YORKTOWN scout 2 CA's, course 310° T. speed 12 knots.
6. 0738 Cardiv 5 planes sight and report NEOSHO and SIMS as Allied Carrier Force.
7. 0745 Japanese twin float single engine seaplane shot down by YORKTOWN scout.
8. 0748 B-17 contact: "Enemy Fleet 1 CV, 16 warships and 10 AP's bombed by 2 B-17 in Lat. 10°-54' S, Long. 152°-56' E."
9. 0810 Japanese twin pontoon single engine seaplane sighted by TG 17.3.
10. 0815 Contact report received by YORKTOWN from her scout 2 CV, 4 CA, Lat. 10°-05' S, Long. 152°-27' E., course 140° T., speed 18-20 knots.
11. 0820 FURUTAKA No. 1 plane sights U.S. Task Force.
12. 0833 Radar contact by TF 17 unidentified plane bearing 295° T., distance 30 miles-CAP failed to intercept.
13. 0840 KINUGASA No. plane reports enemy task force composed of 1 CV, 1 BB, 2 CA, 7 DD.
14. 0859 SIMS missed by single bomb dropped by reconnaissance plane.
15. 0905 Japanese twin pontoon single engine seaplane shot down by YORKTOWN scout.
16. 0926-0947 LEXINGTON launched attack group 10 VF, 12 VS, 16 VB, 12 VT.
0944-1013 YORKTOWN launched attack group 1 VF, 17 VS, 7 VB, 10 VT.
17. 0942 B-17 sighted and identified by TG 17.3.

18. 0930 NEOSHO reported sighting many planes in Lat. 16°-05' S, Long. 159°-08' E.
19. 1044 Radar contact made by TF 17 unidentified plane closing on bearing 045° T., distance 41 miles-1 section YORKTOWN CAP intercepted and shot down one KAWANASHI flying boat about 15 miles from the T.F. at 1100.
20. 1100 CarDiv 5 planes correct 0736 report of Allied Carrier Force to be a Convoy. (NEOSHO, SIMS actually).
21. 1100-1130 SHOHU attacked and sunk by YORKTOWN-LEXINGTON Attack Group.
22. 1110 Army Air Contact 9 vessels.
23. 1131-1146 SIMS and NEOSHO attacked by 27 dive bombers. SIMS sunk NEOSHO-received 7 direct hits.
24. Army Air Contact 3 CA's.
25. 1200 Army Air Contact; "Convoy, 19 ships plus 11 men of war."
26. 1240-1338 YORKTOWN-LEXINGTON recovered attack groups.
27. 1300 Approximately 12 Japanese carrier based dive bombers sighted approaching by TG 17.3, but retired without attacking.
28. 1345 Radar contact by T.G. 17.3 on group of planes bearing 135° T. distance 28 miles, later identified as 10 Japanese single engine monoplanes when sighted at 1357, apparently chasing a U.S. carrier VSB. Japanese planes broke formation and retired when fired upon.
29. 1410 U.S. carrier (VSB) apparently lost and low on gas, circled inside screen of T.G. 17.3 and then departed to northward.
30. 1435 Army Air contact 3 warships.
31. 1438 T.G. 17.3 attacked by 12 Bettys carrying torpedoes.
32. 1449 19 High Altitude Bombers (NELLS) from about 15,000 feet straddle AUSTRALIA with 500 yd. bomb pattern.
33. 1457 Three U.S. Army B-26 planes with AUSTRALIA as target drop 5 bombs.

34. 1528 NEOSHO reports she is sinking in Lat. 16°-58' S, Long. 158°-28' E.
35. 1551 Radar contact by T.G. 17.3 on plane bearing 290° T., distance 21 miles. Later identified at 1634 as Japanese twin float single engine seaplane. Continued to shadow formation until 1817.
36. 1630 AOBA No. 2 plane reports enemy force of 1 BB, 2 CA, 3 DD, course 200, speed 16 knots.
37. 1647 Strange aircraft sighted bearing 247° T.-distance 12 miles from T.F. 17.
38. 1700 Army Air contact 5 AP, 1 DD-course 210°.
39. 1711 11th Air Fleet reports enemy here on course 180°. At 1940 report is amplified giving enemy course, as 090° and composed of 1 CV, 1 CA, 2 CL, 4 DD at 1835.
40. 1715 Army Air Contact 5 AP.
41. 1714 Radar contact by T.F. 17 on unidentified plane bearing 000° T, distance 20 miles.
42. 1732 Radar contact by T.G. 17.3 on plane bearing 020° T., distance 19 miles, later identified visually at 1805 as a Patrol Bomber. Remained in vicinity until 1835.
43. 1745 Radar contact by T.F. 17 on large group unidentified planes bearing 144° T., distance 48 miles-LEXINGTON CAP vectored out to intercept, followed by YORKTOWN CAP at 1803.
44. Sunset T.F. 17.
45. 1811 5 Japanese VF shot down by LEXINGTON CAP 1 Japanese VSB shot down by YORKTOWN CAP.
46. 1845 CarDiv 5 Attack plane reports enemy here on course 250°.
47. 1910 T.F. 17 opened fire on 3 Japanese planes in YORKTOWN landing circle - 1 shot down.
48. LEXINGTON radar plot indicates air planes circling. Believed to be Japanese landing circle.
49. Estimated movement of Japanese carriers during 'darkness, night of 7-8 May.

CHRONOLOGICAL LIST OF EVENTS
Noted on chart for period 8-11 May

Zone Time (-11)

1. 0055/8 MONAGHAN departs to search for NEOSHO-SIMS survivors and send dispatches to CINCPAC.
2. 0625/8 LEXINGTON launched 360° air search.
3. 0815/8 2-S-2 makes contact with 2 CV, 4 CA, many DD's.
4. 0815/8 Position of 2 CV, 4 CA, many DD's as given by 2-S-2 in contact report.
5. 0820/8 CTF-17 receives 0815 contact report from 2-S-2.
6. 0822/8 Search planes from Striking Force sight 21.5 Force and report it at 0835 as 2 BB, 2 CA, 5 DD.
7. 0830/8 2-S-1 changes course to amplify contact made by 2-S-2.
8. 0900-
0925/8 YORKTOWN, LEXINGTON Attack Groups launched.
9. 0934/8 2-S-1 locates enemy force and makes contact report.
10. 1014/8 Japanese four-engine flying boat intercepted and shot down by CAP from YORKTOWN.
11. 1017/8 Japanese seaplane shot down by B-17.
12. 1030/8 Planes from 25th Air Flotilla sight Allied Force and report it at 1500 as 1 BB, 2 CA and 4 DD.
13. 1055/8 Radar contact large group of planes bearing 020°, distance 68 miles, closing.
14. 1057/8 SHOKAKU attacked by YORKTOWN Attack Group.
15. 1118-
1132/8 YORKTOWN-LEXINGTON attacked by Japanese planes from SHOKAKU, ZUIKAKU.
16. 1140/8 SHOKAKU attacked by LEXINGTON Attack Group.
17. 1230/8 Army Air Contact 1 AK, 1 AO, Heading south.
18. 1240/8 Army Air Contact, 1 DD, Heading north.
19. 1305/8 Army Air Contact, 1 CL, 5 DD, course 355° (T).

Zone Time (-11)

20. 1327/8 Army Air Contact, 2 AM's anchored.
21. 1340/8 Army Air Contact, 1 AO, 1 AV.
22. 1405/8 Army Air Contact, 2 AM.
23. 1440/8 Army Air Contact, 1 CL, 3 DD, 13 AP. Course 345° (T).
24. 1700/8 6 B-17, 3 B-26 attack 11 AP and 6 other warships. No hits.
25. 1952/8 LEXINGTON abandoned and sunk by PHELPS.
26. 9 May At DEBOYNE seaplanes and seaplane base being constructed. 1 AV and 4 seaplanes damaged by Army Air.
27. 0800/9 False contact by YORKTOWN Scout, 1 CV course 110° (T). Was LIHOU Reef.
28. 8 May 2 AP's bombed by Allied Army Aircraft in Lat. 07°-30' S, Long. 153°-30' E. No hits.
29. 9 May At LAE seen by Allied Army Aircraft 1 AK, 1 AP, 9 barges, 4 small vessels.
30. 1200/9 Army Air Contact, 9 AP at SALAMOA.
31. 1200/9 Army Air Contact 6 men of war at FAISI fueling from AO. Total of 11 ships here.
32. 1500/9 Army Air Contact 3 cruisers, 3 DD, 3 AP, 1 AO in BOUGAINVILLE STRAITS.
33. 1225/9 Army Air Contact 1 SS, Lat. 16°-50' S, Long. 153°-528 E, course 150° (T).
34. 1250/9 Army Air Contact 2 CA's, Lat. 15°-03' S, Long. 148°-44' E, course 060° (T).
35. 1840/9 I-28 reports sighting enemy plane.
36. 10 May Three 4 engine VP seaplanes seen at TULAGI.
37. 0915/10 Tanker fueling DD off BUIN. Considerable shipping and 1 cruiser at FAISI.
38. 1000/10 Army Air Contact 1 CA, Lat. 11°-58' S, Long. 153°-15' E.

39. 1050/10 Army Air Contact Submarine crash dived Lat. 14°-52' S, Long. 152°-20' E.
40. 1050/10 Army Air Contact 1 AK, Lat. 06°-40' S, Long. 154°-04' E, course 321° (T).
41. 1300/10 Japanese submarine attacked by A. d Army Aircraft in Lat. 20°-20' S, Long. 155°-38' E.
42. 1343/10 Submarine attacked by Allied planes in Lat. 19°-43' S, Long. 157°-00' E. Near miss.
43. 0541/11 CM OKINOSHIMA sunk by S-42.
44. 0828/11 Army Air Contact Large ship with 2 DD stopped Lat. 07°-06' S, Long. 155°-55' E.
45. 0830/11 Army Air Contact 3 DD stopped in Lat. 06°-51' S, Long. 155°-54' E.
46. 0850/11 Army Air Contact 1 DD, 2 CL, 1 AP south of BOUGAINVILLE.
47. 0900/11 Army Air Contact Large AO, Lat. 05°-00' S, Long. 149°-39' E.
48. 0941/11 Army Air Contact 2 DD, 1 SS, 1 AO, 9 AP, Lat. 06°-56' S, Long. 155°-50' E.
49. 0945/11 Army Air Contact 1 cruiser, 1 DD, Lat. 06°-55' S, Long. 156°-15' E.
50. 1000/11 DFBOYNE Isl. attacked by Allied Army aircraft.
51. 1135/11 4 AK steaming toward KESSA, another already there.
52. 1157/11 PBV from NOUMEA sights NEOSHO and reports position.
- 1550/11 NEOSHO sunk by HELM.

THE BATTLE OF THE CORAL SEA
2400, 7 MAY 1942 TO 2400, 11 MAY
TIME ZONE (-11)

Stippling indicates area of 1100, 8 May 1942 was quasi-stationary.

Area covered by Army planes, number unknown.

AUSTRALIA

- (5/8) 6B-17, 3B-26 attack IJAP and 6 other warships. No hits.
6B-17 vs CONVOY. Unable to locate so attacked KITOB.
- (5/9) 1B-17 vs RABAU. Failed due to bad weather so vs DEBOYNE IS.
6B-17 vs RABAU. Failed due to weather.
3B-26 vs TORLESS IS. near DEBOYNE IS.
3B-25, 2B-26, 9B-17 seeking carrier but failed due to darkness.
- (5/10) 7B-17 vs LAE. Weather bad so 4B-17 vs DEBOYNE IS.
1B-17 vs DEBOYNE IS.
- (5/11) 9B-17 unable to find carrier so attacked shipping at BUKA IS.
3B-17 failed vs RABAU due to bad weather so vs DEBOYNE IS.
- (5/12) 3B-17 scheduled to attack RABAU, cancelled flight due to weather.

HOBART, WALKER arrive Townsville.
WALKER departs for Brisbane.

CHICAGO GRP fueling then proceed to Brisbane.

SOWESPAC

THE BATTLE OF THE CORAL SEA
2400, 7 MAY 1942 TO 2400, 11 MAY 1942
TIME ZONE (-11)

45-96 H

THE BATTLE OF THE CORAL SEA
2400, 7 MAY 1942 TO 2400, 11 MAY 1942
TIME ZONE (-11)

SOPAC

SOWESPAC

DIAGRAM-G

DIAGRAM-G